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# USSR Report

ECONOMIC AFFAIRS

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## ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

### EXPANSION OF ASSOCIATION NETWORK ADVOCATED FOR BSSR

Moscow EKONOMICHESKAYA GAZETA in Russian No 7, Feb 86 p 9

[Article by V. Medvedev, corresponding member of the Belorussian SSR Academy of Sciences, doctor of economic sciences, professor: "To Expand the Network of Intersector Associations"]

[Text] The experience gained in Belorussia in improving the organization and management of scientific and technical progress indicates that major production and scientific-production associations are the best way to solve these tasks. Scientific research, design-and-planning, startup, assembly and production subdivisions are concentrated in them at a single center.

Some 15 scientific-production associations are operating within the republic. The existing scientific-production associations set up on public foundations in academy and VUZ science have also been developed. However, far from full use is being made of the opportunities offered by this organizational form for combining science and practical work. In a number of cases associations have been set up only on a purely formal basis, without the required comprehensive and profound structural changes in the planning and organizational-economic foundations of relations between the subdivisions included in the association, and also with the economic and management organs. Science and production are planned separately. Test enterprises have been set targets for labor productivity growth, reductions in prime costs and improved profitability just like the series-production facilities. There are virtually no long-term plans for the development of new equipment. Planning for the development of new technologies and their introduction in new production facilities are not always coordinated.

Moreover, the number of existing scientific-production associations is obviously inadequate to meet the present requirements of socioeconomic development. A study of the operation of sector scientific research organizations within the republic makes it possible to assert that the effectiveness of their activities is declining. One reason for this is their gradual and steady transformation into appendages of the departments, which impose many management functions on their subordinate institutes. As a rule, therefore, the structure of the scientific organizations is set up in accordance with the structure of the management apparatus in the ministries and is essentially an extension of it. In many ministries there are small,

inefficient laboratories and design-and-technological organizations. Most of the departmental-sector scientific research institutes do not have the necessary complement of scientific personnel in line with the corresponding test-and-experimental and planning-and-design bases.

In our view it is essential considerably to expand the network of large scientific and scientific-production associations, strengthen their scientific and technical subdivisions, and be more decisive in including within their framework the sector and departmental scientific research institutes and design bureaus and technological bureaus. As the draft Main Directions emphasize, only the comprehensive head scientific research institutes conducting research of a general sector nature should be directly subordinate to the ministries and departments.

Special attention should be paid to the development of intersector associations. When they are being set up they still encounter a multitude of departmental barriers. A number of proposals on the formation of such associations have remained unresolved for many years. A proposal to set up within the republic an intersector scientific-economic association with double subordination (the Academy of Sciences and the Gosplan) was made 8 years ago. When this was done they proceeded from the premise that the republic is extremely compact in size and has at its disposal considerable potential in the economic sciences. Five scientific research economic establishments, in which 2,000 people work, are engaged only with major intersector problems.

Unfortunately, this kind of association has still not been set up. The separateness in the organization of economic research creates great difficulties in drawing up plans and conducting the research itself. And the gap between theoretical and methodological research and planning is unacceptable for effective leadership in the economic sciences.

The following is an example of the separateness of efforts expended by the economists. For 20 years the head developer for the republic comprehensive program for scientific and technical progress has been the Belorussian SSR Academy of Sciences Institute of Economics. And for 20 years the role of developing the scheme for the development and disposition of production forces and also the 1986-1990 comprehensive program for production intensification on the basis of the achievements of scientific and technical progress has been played by the BSSR Gosplan Scientific Research Economics Institute. But all three of these developments should flow one from the other and make up a conceptually single scientific document for the long- and medium-range development of the republic's national economy within the system of the national economic complex. Such a document should be drawn up by a single scientific collective under unified scientific and methodological and organization guidelines.

The dissipation of the economists' efforts in a multitude of establishments can also be seen from the following. Subdivisions of two Gosplan institutes, departments of the Scientific Research Economics Institute and intersector centers for scientific and technical information operating under the auspices of the Belorussian Scientific Research Institute for Scientific and Technical Information function in all the oblasts of the republic; and they are all

located in separate premises. The separateness of the economics establishments and subdivisions does not help work on the major economic problems of scientific and technical progress and socioeconomic development. A number of important themes that are underfunded and on which work has been underway for many years are losing their urgency or are being handled at a low scientific level.

All this moves to the forefront the concentration of the efforts of economists and the organization of intersector amalgamation of the economics establishments within the republic. The creation of this kind of amalgamation would make it possible to make more rational use of the scientific potential, focus efforts on work on the most important problems, eliminate duplication in research, and raise the level of research. It would become possible to free up a large number of associates engaged in information work, accounts, reporting and the planning of research and development, and sharply reduce the managerial apparatus.

The question of setting up a scientific-economics association within the BSSR as part of the intersector scientific research institutes in the economics disciplines has been considered at various levels. At one time the USSR State Committee for Science and Technology recognized the expediency of setting up the association. However, the association has still not been set up because of the lack of accord between departmental interests and the inertia and conservatism of the existing organizational forms.

In order to concentrate the efforts of the social, natural and technical sciences on solving within short time periods the major intersector problems of scientific and technical and socioeconomic development it would be necessary to set up within the republic a well-organized system of intersector scientific-technical associations (or complexes) and centers. Their activities should be aimed at improving the interaction of the academy, sector and VUZ sectors of science and at developing and introducing on an extensive scale fundamentally new kinds of equipment, technologies and organizational, planning and managerial systems.

It is expedient to create these kinds of associations and complexes for all the most important directions in science, technology, economics and social development. In our opinion, regardless of their departmental subordination, they should include scientific establishments conducting basic research and applied and test-and-design work, and also working on the organization of introduction and experimental industrial enterprises.

In this connection the following addition is proposed to one of the provisions in the draft new edition of the Party Program, dealing with improvements in the organizational structure of management, to wit: after the words "expand the network and improve the work of the production and scientific-production associations" add the following: "to form an effective network of intersector scientific and scientific-production complexes and associations in the various spheres of the national economy."



## ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

### CENTRAL COMMITTEE DECREE ON EXPEDITING CONSTRUCTION, RENOVATION

Moscow SOBRANIYE POSTANOVLENIY PRAVITELSTVA SOYUZA SOVETSKIKH SOTSIALISTICHESKIKH RESPUBLIK in Russian No 11, 1986 pp 163-176

[Decree No. 328, dated 13 March 1986, of CPSU Central Committee and USSR Council of Ministers, and appendix thereto]

[Text] Decrees of the USSR Central Committee and USSR Council of Ministers

[Article] 67. "Additional Measures to Improve Capital Construction for the Purposes of Accelerating Scientific-Technical Progress in the Country's National Economy"

The CPSU Central Committee and USSR Council of Ministers note that, for purposes of implementing the decisions of the 27th party congress on questions of accelerating the country's social and political development on the basis of scientific-technical progress, it is necessary to take additional measures to improve capital construction and increase its effectiveness. It is necessary to raise to a new industrial and organizational level the entire construction complex and reduce by at least half the investment cycle both during the remodeling of enterprises and during the construction of new projects.

It is completely inadmissible to have the continued dissipation of capital investments in the national economy, or to have no guarantee that many enterprises and projects will be activated by the established deadlines. As a consequence, the technological processes and the equipment stipulated in the construction plans become obsolete. All this, in the final analysis, has been restraining the rates of scientific-technical progress.

USSR Gosplan, USSR ministries and departments, the Councils of Ministers of the union republics, and the associations and enterprises have not been paying proper attention to the technical re-equipping and remodeling of the existing production entities. There has been a slow rate of increase in the share of the funds allocated for those purposes in the overall volume of capital investments. The assets part of fixed capital is being insufficiently renewed on the basis of the achievements of science and technology.

The volumes of construction operations executed by the in-house method have been increasing at low rates. There has been incomplete implementation of the favorable opportunities granted to the enterprises and organizations in using the production development fund and the fund for social and cultural measures and housing construction. This has been exerting a detrimental effect upon the resolution of production tasks and the social development of labor collectives.

Guided by the decisions of the 27th CPSU Congress with regard to the further improvement of capital construction, and for purposes of accelerating scientific-technical progress in our country's national economy, the CPSU Central Committee and USSR Council of Ministers decree:

1. The Central Committees of the Communist Party of the union republics, the CPSU kray and oblast committees, USSR ministries and departments, Councils of Ministers of the union and autonomous republics, the executive committees of the kray and oblast Soviets of People's Deputies, and all the party, Soviet, economic, trade-union, and Komsomol organizations are to:

-- view the increase in the effectiveness of capital construction as one of the most important tasks in economic policy which are aimed at accelerating the rates of the country's social and economic development, at introducing the achievements of scientific-technical progress, changing over the national economy to the intensive path of development, and the implementation of the basic goals in the CPSU Program -- the reinforcement of the country's economic potential and the rapid rise in the national standard of living;

-- guarantee, in conformity with the requirements of the 27th CPSU Congress with regard to the improvement of the investment policy, an increase in the effectiveness of the use of capital investments, their concentration in the decisive sectors, the re-equipping and remodeling of existing production entities, the reduction of the periods of time required for construction and the improvement of the quality of construction, and the mobilization of the internal reserves of the enterprises for the purpose of obtaining the greatest increase in output and the national income for every ruble of expenditures.

#### Additional Measures to Guarantee the Construction of Enterprises and Projects Within the Normative Periods of Time

2. It is to be considered one of the chief tasks of the USSR ministries and departments, Councils of Ministers of the union and autonomous republics, the executive committees of the kray and oblast Soviets of People's Deputies, and production associations, enterprises, and organizations to change over during the 12th Five-Year Plan to the construction of enterprises and projects in strict conformity with the established norms specified for the duration of construction and their activation by the deadline or ahead of schedule.

It is established that the planning of the construction of projects in conformity with the norms for duration of construction is to be carried out for newly begun construction sites starting in 1986 and for carryover construction projects starting in 1987.

3. USSR Gosplan, USSR ministries and departments, the Councils of Ministers of the union republics, and the production associations, enterprises, and organizations, when developing the capital-construction plans and master lists for construction sites, are to observe strictly the norms for duration of construction of enterprises, buildings, and structures.

Ministries and departments and production associations, enterprises, and organizations are to be banned from coordinating the plans for contract operations if they do not correspond to the approved master lists for the construction projects.

If, during the year that has elapsed, the operations were fulfilled in a lesser volume than was stipulated in the plan and the master list, the lag that had been allowed to occur must be made up, as a rule, during the subsequent year (without changing the deadlines for activation of the capacities and projects), with the introduction of the appropriate amendments to the master list and the plan for contract operations.

For especially large-scale and one-of-a-kind projects that are included in the capital-construction plan and that do not have any established norms for duration of construction, the deadline for their construction and the distribution of the volumes of capital investments and construction-and-installation operations among the individual years are defined in the plans for the construction of those projects by the appropriate ministries and departments and are approved by USSR Gosplan and USSR Gosstroy.

USSR Gosstroy and USSR Gosplan, with the participation of the ministries and departments, are to approve, within a six-month period, the norms for the duration of the construction of enterprises, buildings, and structures in the 12th Five-Year Plan with a consideration of the achievements of scientific-technical progress, the increase in the effectiveness of capital construction, industrialization, and the improvement of the organization of construction production, and also are to expand the list of projects for which these norms are established.

4. The USSR ministries and departments and the Councils of Ministers of the union republics, with the participation of the contractor ministries, when preparing the draft of the plan for the 12th Five-Year Plan, are to:

a) determine the sequence of construction of enterprises and projects that have been carried over to the 12th Five-Year Plan, proceeding from the limits for capital investments and construction-and-installation operations that are planned for 1986-1990 and the approved norms for the duration of construction, having in mind the guaranteeing of the activation first of all of projects intended for social and cultural purposes and the production capacities that determine the proportional development of the country's economy and the branches, and for which the production of the output that is most important for the national economy is stipulated;

b) make decisions concerning the temporary mothballing of enterprises and projects under construction, the technical level of which does not conform to



present-day requirements, which cannot be provided with capital investments for activating them in conformity with the norms for the duration of construction. Decisions concerning the mothballing of enterprises and projects whose master lists, in accordance with the procedure that is in effect, the USSR ministries and departments and the Councils of Ministers of the union republics do not have the right to approve independently, must be coordinated with USSR Gosplan.

USSR Gosplan is to summarize the recommendations for the mothballing of construction projects and for changing the deadlines for activation of capacities and projects the construction of which was stipulated by previously adopted decisions of the USSR Government and is to submit the appropriate recommendations to USSR Council of Ministers, proceeding from the assumption that the capacities planned for the 12th Five-Year Plan must be fully activated.

5. USSR Stroybank and USSR Gosbank are not to accept for financing, starting in 1986, the newly begun construction projects whose duration of construction, according to the master lists, exceeds the normative duration, and, starting in 1987, carryover construction projects for which the limits for capital investments and construction-and-installation operations have been allocated in lesser volumes that is necessary for completing their construction within the normative periods.

6. USSR Gosplan is to carry out the further improvement of the planning methods, having in mind the guaranteeing, starting in 1987, of the efficient combination and coordination of the branch and territorial plans.

USSR Gosplan, jointly with USSR Gosstroy, the USSR ministries and departments, and the Councils of Ministers of the union republics, is to guarantee the careful working out of questions of the placement of new enterprises and the remodeling of the operating ones in the areas of concentrated construction. When there are high growth rates for the volumes of construction in the appropriate region, provision is to be made in the plans for the necessary measures to increase the capacities of the construction organizations, and for the first-priority channeling to the construction projects in that region of progressive structurals, articles, and materials, and highly productive machines and machinery that make it possible to raise considerably the technical level of construction production; and determination is to be made of the efficient sequence for construction and activation of the enterprises and projects.

For the fulfillment of the planned assignments for construction and activation of enterprises and projects within the normative periods, the construction ministries are to guarantee the prompt development of the production capacities of the construction-and-installation organizations by drawing on the funds allocated to those ministries, as well as the funds transferred to the customers within the established procedure for those purposes.

The ministries, departments, and production associations, enterprises, and organizations, when developing the drafts of the capital-construction plans, are to consider and resolve, jointly with the Councils of Ministers of the

union republics and with the executive committees of the kray and oblast Soviets of People's Deputies, the questions of the prompt activation of the enterprises and projects, the complete providing of them and the construction organizations with labor resources, and the assimilation of the activated capacities within the normative periods.

7. The USSR ministries and departments, Councils of Ministers of the union republics, USSR Gossnab, and its soyuzglavkomplekts and territorial agencies, are to guarantee the complete delivery to the construction projects of structural elements, materials, and equipment in accordance with schedules that are strictly coordinated with the deadlines for the fulfillment of the construction-and-installation operations and the activation of the production capacities and projects.

USSR Gossnab is to carry out, in 1987-1988, measures to improve the material-technical support of the construction projects, having in mind the organization of the supplying of the construction subdivisions and production associations and enterprises on the basis of their production orders in conformity with the allocated funds, directly through the territorial agencies of USSR Gossnab.

8. USSR ministries and departments and Councils of Ministers of the union republics are to be granted the right to approve, starting in 1987, the limits for exploratory-design operations to be carried out at the expense of capital investments according to standards approved for them by USSR Gosplan for the five-year period.

USSR ministries and departments and Councils of Ministers of the union republics are to take effective steps to achieve the fundamental improvement of the planning of exploratory-design operations and to improve their quality. The officials who are guilty of development design-estimate documentation that does not conform to the present-day scientific-technical level, and also that which is not used in construction by the planned deadline, are held materially responsible according to the established procedure.

9. Starting in 1987, customers are to pay into the state budget 3 percent of the value of the fixed production assets that have not been activated within the established deadline, and construction-and-installation organizations operating under contract are to pay 3 percent for credit for expenditures involved in the uncompleted carrying out of construction-and-installation operations at enterprises and projects after the expiration of the planned deadlines for their activation.

The expenses linked with the extraction of this payment from the customers for existing enterprises are included in the results of their economic activity, and for new construction are carried out by drawing on centralized funds and reserves of the superior agencies of economic administration. Expenses linked with the extraction from contract organizations of payment for credit are included in the results of their economic activity.

USSR Ministry of Finance, jointly with USSR Stroybank and USSR Gosbank, is to publish a corresponding instruction dealing with this question.

10. USSR ministries and departments and Councils of Ministers of the union republics are to develop and carry out measures to guarantee smoothness in the construction of enterprises and projects as a very important condition for reducing the duration of construction and the activation of production capacities within the established normative deadlines. There is to be a consistent decrease in the specific capital investments per unit of capacities to be activated. Steps are to be taken to achieve the further development of relationships of cost accountability among the contract organizations and customers and the other participants in construction.

Measures to Increase the Self-Interestedness of the Construction-and-Installation Organizations and Other Participants in Construction in Carrying Out Operations Involved in the Technical Re-equipping and Remodeling of Existing Production Entities

11. The technical re-equipping and remodeling of existing production entities on a qualitatively new technological basis is to be considered one of the chief directions in the development and renovation of the fixed production assets in the national economy. The guarantee must be provided in practical work that the remodeling of the enterprises is economically profitable both for the customer and for the contractor.

12. USSR Gosplan, USSR ministries and departments, and Councils of Ministers of the union republics are to consider, in the draft of the plan for the 12th Five-Year Plan, the increase in the share of the funds to be channeled into the technical re-equipping and remodeling of existing production entities, which for the national economy as a whole is no less than 50 percent of the overall volume of capital investments for the construction of projects intended for production purposes. Consideration is also to be taken to assure that the associations and enterprises direct first of all to those purposes the means in the production development fund.

13. USSR Gosplan is to establish for the USSR ministries and departments and Councils of Ministers of the union republics:

-- in the annual and five-year plans for construction-and-installation operations to be fulfilled by contract and in-house methods, the volumes of operations for the technical re-equipping and remodeling of the existing production entities;

-- the assignments for increase in labor productivity and profit, as well as the wage norms with a consideration of the volumes and labor-intensity of the operations involved in technical re-equipping and remodeling.

USSR ministries and departments and Councils of Ministers of the union republics are to plan in the same procedure the mentioned indicators and norms for their subordinate construction-and-installation organizations, as well as for the production associations and enterprises carrying out the technical re-equipping and remodeling of the production entities by the in-house method.



14. For purposes of intensifying the self-interestedness of the production associations, enterprises, and construction-and-installation organizations in the carrying out of the technical re-equipping and remodeling of existing production entities, the further expansion of their economic independence, and the increase in the responsibility for the final results of the work, the customers and contractors are to be granted the right, when carrying out these operations, to determine the organizational and economic interrelationships on the basis of special contracts and the coordinated estimated value (contract price) of the operations.

The customer production associations and enterprises and the construction-and-installation and construction-design organizations, simultaneously with the development of the drafts for the technical re-equipping and remodeling of the existing production entities, prepare drafts for carrying out the operations and define the methods and sequence of fulfilling them with a consideration of the specific conditions. They establish the extent and forms of compensation of the additional expenditures linked with the carrying out of the operations under conditions of an existing production entity, the procedure and conditions for taking workers away from their basic production duties and sending them to construction-and-installation organizations, for transferring the necessary technological equipment, and the rendering of various services.

It is established that the saving of funds, as compared with the coordinated and approved estimated value (contract price) of the operations for technical re-equipping and remodeling, which saving is obtained by construction-and-installation organizations as a result of the application of progressive methods of organizing labor and production or of effective structural elements and materials, the fulfillment of operations with a smaller number of workers, and the carrying out of other measures that reduce the cost of construction (while guaranteeing the high quality of operations, the durability of the structural elements, and the operational reliability of the projects being constructed), remains at the disposal of those organizations.

Production associations, enterprises, and construction-planning organizations are to be authorized, when preparing the estimate documentation for the technical re-equipping and remodeling of existing production entities:

- to apply individual estimated norms, payment rates, and costings or increasing coefficients to the estimated value of the construction-and-installation operations, and overhead expenses according to increased norms;

- to include a reserve of funds for unforeseen operations and expenditures in amounts in accordance with the appendix;

- to stipulate funds for the payment of bonuses for activation, on deadline or ahead of schedule, production capacities and projects in accordance with norms increased up to 50 percent as compared with the ones in effect;

- to include expenditures linked with the payment of bonuses to workers for fulfilling assignments paid for at job rate on the basis of increased norms and with the extension to the construction workers of benefits when working in existing shops with hazardous working conditions.

The personal responsibility for the substantiation and correctness of the application of individual estimate norms, payment rates, and costings, and the overhead expenses, is to be placed upon the managers of the customer enterprises and the construction-planning organizations.

USSR Gosstroy and USSR Gosplan are to prepare and approve within a one-month period the methodological-norm documents necessary for developing the estimates for the technical re-equipping and remodeling of the existing production entities, including those for determining the overhead expenses.

USSR State Committee for Labor and Social Problems, USSR Gosstroy, and AUCCTU are to introduce into the corresponding normative documents, within a one-month period, the changes evolving from this paragraph.

15. The construction-design and exploratory organizations are to be authorized to accept additionally, during the course of the year, orders from production associations and enterprises for the development of design-estimate documents for technical re-equipping, with the transferral by the customers, whenever necessary, of the corresponding limits for the number of workers and the wage fund.

16. The managers of production associations and enterprises are to be authorized:

a) after coordination with the trade-union committees, to transfer to the disposal of the construction-and-installation organizations some of the money in the material incentive fund for the purpose of paying bonuses to workers for the preterm carrying out of operations to remodel individual units, assemblies, and systems, thus allowing the enterprise to obtain additional output or additional profit;

b) to transfer the material-technical resources (as a result of the economizing of them), obtained in a planned procedure for the basic activity, to construction-and-installation organizations in order to accelerate the fulfillment of the operations involved in the technical re-equipping and remodeling of existing production entities without any detriment to the fulfillment of the approved production plan.

17. The managers of construction-and-installation organizations are to be authorized, during the period of fulfillment of the operators involved in the technical re-equipping and remodeling of existing production entities:

-- to establish for workers carrying out the work in existing shops with dangerous working conditions, without stopping production, additional leave periods with a consideration of the amount of time actually worked, and also a shortened work day, and to issue without payment medical nutrition, as well as work clothing on the basis of norms established for the operational personnel in those shops;

-- to increase for the workers, within the limits of the established wage fund, the maximum size of the bonuses for fulfilling, under contract

conditions, assignments paid by job rate within the deadline or ahead of schedule, to 60 percent of the piecework rate.

18. There will be an increase in the responsibility borne by the soyuzglavkomplekts and territorial agencies of USSR Gosplan, and the associations and enterprises that are the suppliers of equipment and materials, for promptly delivering, in accordance with the schedules, the equipment and materials for the technical re-equipping and remodeling of existing production entities, which prompt delivery guarantees the activation of the capacities and projects within the established deadlines. For these purposes USSR Gosplan is to carry out the evaluation of the activity of these organizations and the providing of economic incentives for them, with a consideration of the results of the prompt and complete fulfillment of the contracts and plans for delivery of material-technical resources for the technical re-equipping and remodeling of the existing production entities.

19. The ministries and departments, jointly with the appropriate central committees of trade unions, when developing the terms for the All-Union Socialist Competition for the 12th Five-Year Plan among the collectives of the production associations and enterprises and construction-installation and experimental-design organizations, are to stipulate the evaluation of their activity with a consideration of the quality and deadlines for fulfillment of the planning assignments for the technical re-equipping and remodeling of existing production entities.

#### Measures for the Further Development of the In-house Method of Construction

20. It is deemed necessary to guarantee in the 12th Five-Year Plan the further development and improvement of the in-house method of construction, primarily for the carrying out of the technical re-equipping and remodeling of existing production entities.

Attention is to be concentrated on the carrying out of operations by the in-house method which are to be fulfilled chiefly at the expense of means in the production development fund and the fund for social and cultural measures and housing construction.

USSR Gosplan is to stipulate in the draft of the plan for 1986-1990 the assignments for the USSR ministries and departments, and also for the Councils of Ministers of the union republics, for increasing the volumes of construction-and-installation operations to be carried out by the in-house method by an average of 25-30 percent. The specific volumes of the construction to be carried out by the in-house method are established in a differentiated manner for the various branches of the national economy and the union republics.

The USSR ministries and departments, Councils of Ministers of the union republics, and the production associations and enterprises are to be required to develop and carry out specific measures to guarantee the fulfillment of increasing volumes of operations by the in-house method. Steps are to be developed and carried out to raise the level of industrialization,



mechanization, and quality of construction, to improve the technological schemes in construction-and-installation operations, and to assure the broad use of advanced Soviet and foreign experience.

21. The USSR construction ministries, USSR Ministry of Power Engineering and Electrification, USSR Ministry of the Coal Industry, and USSR Ministry of Land Reclamation and Water Management are to stipulate, without any detriment to the fulfillment of the plans for contract operations that have been established for them:

-- the manufacture and delivery to production associations and enterprises fulfilling operations by the in-house method, on the basis of orders submitted by them, metal, prefabricated reinforced-concrete and concrete structurals, commercial concrete and mortar, and wooden and other construction articles, provided the customers transmit to them the materials that are necessary for this purpose. The manufacture of these structurals, materials, and articles is to be included in the fulfillment of the production plan;

-- the leasing to the production associations and enterprises fulfilling operations by the in-house method of construction machines and machinery, as well as the carrying out of individual types of mechanized operations based on direct contracts with them, with the inclusion of those operations in the volume of contract operations.

The Councils of Ministers of the union and autonomous republics and the executive committees of the Soviets of People's Deputies are to allocate to the production associations and enterprises local construction materials and articles made from them, which are necessary for fulfilling operations by the in-house method.

22. USSR ministries and departments and the Councils of Ministers of the union republics, in order to carry out the growing volumes of construction-and-installation operations involved in the technical re-equipping and remodeling of existing production entities, and also in the construction of projects intended for social-cultural and everyday purposes, are to create:

a) as part of production associations and enterprises situated in the rayons where the capacities of the organizations of the construction ministries and the construction-and-installation organizations on an independent balance sheet are insufficient, and at enterprises and in shops for the fulfillment of small volumes of operations for the development of production -- construction subdivisions (brigades, sectors, shops).

USSR State Committee for Labor and Social Problems and USSR Gosstroy are to approve, within a three-month period, upon coordination with AUCCTU, the indicators for assigning these subdivisions to groups for the payment of labor performed by managerial and engineer-technical workers;

b) subsidiary production entities for the manufacture of materials, structurals, and articles necessary for the fulfillment of operations by the in-house method, if the need for them cannot be guaranteed by the enterprises in the construction industry and the construction-materials industry. Wider

use is to be made for these purposes of the production development funds of the enterprises and associations, and of bank credit.

The right is to be granted to USSR ministries and departments and Councils of Ministers of the union republics to authorize for their subordinate production associations and enterprises situated in the same rayon, to transfer in a procedure of shared participation the capital investments and material-technical resources for the construction of united bases in the construction industry.

23. The managers of production associations and enterprises are to be authorized to channel direct material-technical resources (resulting from an economizing of them) stipulated in the plan for the basic activity, into the fulfillment of construction-and-installation operations by the in-house method, without detriment to the fulfillment of the production plan.

24. Production associations and enterprises fulfilling, at the expense of their own funds, operations involved in the technical re-equipping and remodeling of existing production entities by the in-house method, are granted the right to establish independently the time periods for the development and issuance of design-estimate documentation depending upon the specific conditions for the carrying out of the operations.

25. USSR Gosplan and USSR Gossnab are to stipulate in the plans the allocation to the USSR ministries and departments and the Councils of Ministers of the union republics for the fulfillment of operations by the in-house method, construction materials, machines, motor transport, and other material-technical resources on the basis of norms to be determined on the basis of the structure of the operations, in the procedure established for contract organizations of construction ministries.

26. USSR Ministry of Installation and Special Construction Operations, Ministry of Transport Construction and other USSR construction ministries, and USSR Ministry of Power Engineering and Electrification are to be authorized to fulfill specialized and construction operations at projects that have not been stipulated in the plans for the contract organizations of those ministries, in accordance with direct contracts with the production associations and enterprises that are carrying out the construction by the in-house method primarily at the expense of the means in the production development fund and the fund for social and cultural measures and housing construction.

These operations are to be included in the volume of the fulfilled contract operations without an increase in the plan for those organizations.

27. Managers of production associations and enterprises and of other organizations fulfilling operations involved in the technical re-equipping and remodeling of existing production entities by the in-house method are to be granted the right to retain, within the established procedure, for the workers temporarily assigned to those operations the average monthly wages received at their basic place of work, provided they have fulfilled the established assignments.

28. USSR Ministry of Justice, USSR Gosplan, USSR Gosstroy, USSR State Committee for Labor and Social Problems, and USSR Ministry of Finance are to submit, within a six-month period, to USSR Council of Ministers a recommendation concerning the introduction into the existing legislation of the changes evolving from this decree.

29. The Central Committee of the Communist Party of the republics, the party's kray and oblast committees, the USSR ministries and departments, the executive committees of the kray and oblast Soviets of People's Deputies, the trade-union and Komsomol agencies, and the managers of associations, enterprises, and organizations, are to extend broadly the organizing and political work at the construction projects and enterprises themselves, for purposes of improving the capital construction on the basis of the acceleration of scientific-technical progress, the industrialization of construction production, and the increasing of its effectiveness. High discipline and coordinated action in the work of all participants in the investment process are to be guaranteed, and any manifestations of a departmental approach or of giving a preference to local interests are to be decisively cut short. In the course of organizing the socialist competition among the construction workers, construction planners, and workers at the customer enterprises, special attention is to be paid to developing a mass movement of workers for the thorough remodeling of the national economy on the basis of the latest achievements of science and technology in the light of the decisions of the 27th CPSU Congress.

The CPSU Central Committee and USSR Council of Ministers express their firm conviction that the economic, party, and Soviet organizations and the labor collectives of the construction projects, associations, and enterprises will do everything necessary for the further improvement of capital construction for purposes of the acceleration of scientific-technical progress in the country's national economy and will make a worthy contribution to the implementation of the decisions of the 27th CPSU Congress.

Secretary of  
CPSU Central Committee  
M. Gorbachev

Chairman of  
USSR Council of Ministers  
N. Ryzhkov

Moscow, Kremlin, 13 March 1986, No. 328.

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Appendix to decree of CPSU Central  
Committee and USSR Council of Ministers,  
dated 13 March 1986, No. 328

Maximum Sizes of Fund Reserve for Unforeseen Operations and  
Expenditures Which Is to Be Included in the Combined  
Estimated Computations of Value for Construction Plans for

the Technical Re-Equipping and Remodeling of Existing  
Production Entities

In the combined estimated computations of value for construction plans for the technical re-equipping and remodeling of existing production entities, the fund reserve for unforeseen operations and expenditures must be stipulated in the following sizes (in percentages of the estimated value of construction):

-- for enterprises in ferrous and nonferrous metallurgy, and for nuclear electric-power stations, up to 12 percent;

-- for enterprises engaged in the production and processing of chemical output, and for thermal electric-power stations, up to 10 percent;

-- for enterprises engaged in the processing of agricultural output, in the machine-building complex, and the construction-materials industry, up to 7 percent;

-- for enterprises in other branches of the national economy, up to 6 percent.

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CSO: 1820/117



## PLANNING AND PLAN IMPLEMENTATION

### VALOVOY POINTS OUT NEED TO REVISE PRODUCTION INDICATORS

Moscow PLANOVYE KHOZYAYSTVO in Russian No 1, Jan 86 pp 62-72

[Article by D. Valovoy, doctor of economics, professor: "On the Measurement and Evaluation of Production Activity"]

[Text] For the measurement of production activity, a single all-round indicator for all links of the national economy, similar to the meter and kilogram in geometry and physics for the determination of distance and mass is needed. A genuine science, in the words of D. I. Mendeleyev, begins at the point in time when measuring begins. Physics and chemistry became sciences only when precise units of calculation were found and the laws of their development were known. Economics, as any other science, cannot develop without scientifically-based measurement of the results of production activity and the objective evaluation of the work of the economic links.

In the draft of the new edition of the Program of the Party it is indicated that the entire system of management must be aimed at the increase of the contribution of every link to the achievement of the final goal--the fuller satisfaction of the requirements of society with the least expenditures of all types of resources. This provision received further development in the draft of the Basic Directions of Economic and Social Development For 1986-1990 and to the Year 2000. In it, in particular, it is stated: "The main thing now is to attain a change in work in accordance with the decisions of the April (1985) Plenum of the CPSU Central Committee and to realize a turning point in all spheres of economic activity--to attain higher boundaries with smaller expenditures, using to the maximum degree everything that the country has at its disposal--the powerful economic and scientific-technical potential that has been created, all available reserves and possibilities." (Footnote 1) (PRAVDA, 1985, 9 November, p 6).

Do the methods of measurement and the principles of the evaluation of production activity that have developed during the period of mainly extensive growth meet the requirements and the tasks outlined in the drafts of the new edition of the Program of the CPSU and the Basic Directions of Economic and Social Development for 1986-1990 and for the Period to the Year 2000? In our view, no. The determination of the dynamics of economic development "from the attained level" contradicts the fullest satisfaction of the requirements of society with the least expenditures of all types of resources. The increase of the rates of

socio-economic development on the previous base is possible only with the corresponding growth of expenditures of all resources. In the 11th Five-Year Plan the gross national product increased by 29 percent (in actual prices). Consequently, if development is to take place by the old methods, correspondingly greater expenditures are required for the maintenance of previous rates in the new five-year-plan. At the conference for questions of the acceleration of scientific-technical progress it was underscored apropos of this that the "expenditure" path of development dooms the economy to stagnation. Calculations show: If the projected growth of the national income on the previous, to a significant degree extensive, basis is to be secured further, it will be necessary to increase the extraction of fuel and raw material by 10-15 percent and the volume of capital investments--by 30-40 percent every five-year plan period, and to involve an additional 8-10 million persons in the national economy. But we simply do not have such possibilities. But there is no need for this. You see, the so-called shortage is a result of extensive methods of growth.

For a radical turn to intensification of the economy and the creation of a "counter-expenditure economic mechanism", in our view, it is necessary, above all, to change the method of measurement of the volume of production and the principles of the evaluation of the work of the economic links.

Let us start from measurement. At the present time, the contribution of every link of the national economy to the achievement of the final goal is determined by the volume of gross production (or its modification) (Footnote 2) (In order not to create the impression that this indicator is altogether not necessary, a reservation should be made. While commodity-money relationships exist, indicators of gross production, commodity production and production sold are not only necessary for the planning and analysis of the real economic turnover in the national economy with regard to the existing division of labor, but they are simply indispensable. Moreover, on their basis a number of proportions are established and analyzed and the full production cost of concrete articles and the production of the enterprise as a whole is determined. However, taking into account the fact that these indicators are a reflection of the expenditures and include the sum of the repeated calculation of the value of embodied labor, it is more expedient to utilize them as accounting indicators. The sphere of their application should be strictly limited; thus, they are completely useless for the measurement and evaluation of production activity, which is the subject of discussion below), the sum of which will generate the gross national product. Such a measurement does not correspond to the Marxist-Leninist theory of reproduction and the sale of the gross national product. K. Marx demonstrated scientifically that the value of any commodity, as well as the production of individual producers and society as a whole, consists of three parts:  $c + v + m$ . He also discovered the different role of constant ( $c$ ) and variable ( $v$ ) capital in the formation of the value of a new product: The first only transfers the value to the new product, but the second magnifies it. In his article, "Karl Marx", V. I. Lenin called the differentiation of the functions of constant and variable capital in the process of the formation of value a brilliant discovery.

This discovery was placed by K. Marx at the basis of the models of the reproduction of public capital. In so doing, he made a number of assumptions, in particular, that the entire constant capital in the course of a year transfers



its value to the product being newly created and thus excluded the repeated calculation of embodied labor from the total national product being newly created.

As is well known, V. I. Lenin developed the models of reproduction of K. Marx as applied to technical progress. If K. Marx in his abstractions assumed that the organic structure of capital remains unchanged from year to year, V. I. Lenin, in his work "On the So-Called Market Question", constructed his models with regard to the growth of the organic structure of capital and on this basis scientifically formulated the law of the primary growth of the means of production by comparison with the production of consumer goods. But in his abstractions, V. I. Lenin, too, excluded the repeated calculation of embodied labor.

And still another fundamental theoretical aspect of this problem. The classics have repeatedly emphasized that the sole source for the increase of the gross national product is surplus labor. In their models of reproduction, the expansion of production takes place only through the surplus product.

But how does the measurement of the contribution of the economic links to the formation of the value of the gross national product being newly produced take place now? This is done on the basis of the volume of the gross production of enterprises and industries, which includes the repeated recurrence of the value of objects of labor. And the higher the level of specialization and cooperation, the greater the repeated calculation of embodied labor. At the present time, according to calculations of the Scientific Research Institute for Statistics of the USSR Central Statistical Administration, the sum of the repeated calculation of objects of labor exceeds by a factor of 5 the value of the primary objects of labor that are involved in the process of production every year.

As a matter of historical information, it should be said that the theoretically not well-grounded, but practically wasteful method of calculation of the gross national product did not arise today or yesterday. When the Civil War came to an end and the country proceeded with the peaceful construction of socialism, the question arose: How to measure the volume of the production of the economic links and the national economy as a whole?

About the immediate development of such an indicator, V. I. Lenin gave directions in letters to the administrator of the Central Statistical Administration of 4 June and 16 August 1921. He set this task also in a letter to the editors of *EKONOMICHESKAYA ZHIZN* of 1 September 1921. Lenin's request activated the work of scientists and practical workers in the search for such an indicator. Already at that time, scientists demonstrated that gross production does not give a realistic idea of the results attained, since the value of many types of raw materials and semi-manufactures is often repeated, and proposed that net production be used. Such views are reflected in many materials of statistical congresses and conferences which were held regularly in the 1920's.

F. E. Dzerzhinskiy came out especially sharply against gross production. In August 1924, soon after his appointment as chairman of the Supreme Council of the National Economy, he said at the Plenum of the Russian Communist Party (of Bolsheviks), that when we calculate gross production, we completely overlook

our uneconomical, frankly predatory treatment of raw material, fuel, and material. Often our sectors of industry work so as then to let others waste this output. According to our calculations, the more we waste, the more production we have, the higher labor productivity. (Footnote 3) (See F. E. Dzerzhinskiy, "Izbr. proizv." [Selected Works], Moscow, Politizdat, 1977, Vol 2, pp 51-52).

And nevertheless, the "gross product" indicator gradually became, figuratively speaking, the "meter" for the economy. But this meter proved to be "a rubber meter". The higher the level of specialization was, the more strongly it "stretched" and enlarged the gap between the value volume of production and the really created use values in physical terms. As a result, the contradiction between practice and economic theory became increasingly more evident, but the artificial overstating of the production volume in rubles is increasingly more obvious and convincing. For this reason, in the 1950's a number of economists again came out against the inclusion of the repeated calculation of embodied labor in the volume of the final national product. Thus, Academician S. Strumilin called the repeated calculation "a statistical aberration" (error, distortion).

Unfortunately, "gross output" found defenders--and not only among practical workers, but also among scientists. As far as the critique of "gross output" in the course of the economic discussion preceding the economic reform of 1965 is concerned, it was one-sided. The subject of discussion was the uselessness of gross production for the evaluation of economic activity of enterprises and industries. Its function of the measurement of the volume of the gross national product remained completely out of the field of vision.

An analogous picture happened also with the measurement of the productivity of public labor. Now it is determined by means of the division of gross production by the number of workers--the greater the output in rubles per worker, the higher the labor productivity. As a result, the increase of the proportion of embodied labor in the structure of the production being turned out or the assortment of more material-intensive articles automatically "raises" labor productivity without the least efforts of the producers. For example, cast iron pipes with a diameter of 50 and 100 millimeters, as well as rods of 10 and 20 millimeter diameter are produced on one and the same equipment. It is worthwhile to go over to the output of pipes or rods of greater diameter--and the productivity at once "is raised" twofold! Precisely for this reason, there is a surplus of pipes, rods and many other articles of large parameters, but small ones are nowhere to be found.

Such an "increase" in labor productivity contradicts Marxist-Leninist theory. In the first volume of CAPITAL, K. Marx wrote that the magnitude of the value of a commodity is directly proportional to the quantity and inversely proportional to the productive force of labor finding realization in this commodity. Consistently developing this idea, he noted in the third volume that the reduction of the total quantity of labor going into the commodity must serve as an important sign of the increase of the productive force of labor under any public conditions of production. It follows that the higher the labor productivity, the lower the cost of the commodities being produced.

And what is cost? In economic practice, it is represented by price, which, K. Marx wrote, taken by itself is nothing else than the money expression of cost. V. I. Lenin showed that cost is the law of prices, i. e., the generalized expression of the phenomenon of price.

The increase of labor productivity is the foundation of foundations for the reduction of cost, and consequently also prices. Theoretically, this proposition is generally accepted. But practically the steady increase in labor productivity is accompanied. . . by the growth of prices. When labor productivity is measured on the basis of gross (commodity) production, the reduction of prices objectively leads to "the fall" of the growth of labor productivity. The unnaturalness of such a proposition was shown in the address of M. S. Gorbachev, dedicated to the 113th anniversary of the day of birth of V. I. Lenin. He said that "to conduct production intensively means to constantly show concern about the increase of labor productivity at every work place, in every enterprise, in all sectors of the national economy, in a word, "on a nationwide scale". Today, when the country has at its disposal an enormous production potential, it is important to utilize it in full measure, to economize not only living labor, but also objectified labor, labor embodied in machine tools, machines, raw material and materials. Only in such a way can one attain a real effect, for high labor productivity signifies also the economy of resources being used. The increase of labor productivity without the reduction of the cost of a product." Lenin thought, "is absurd, if this is only taken as a general phenomenon." (Footnote 4) (PRAVDA, 23 April 1983, p 2).

A serious attempt to change the method of the measurement of labor productivity were the experiments concerning the use of net production for this, which were conducted on a broad scale at the beginning of the 1970's. But then they began to use normative net product (NChP) for these purposes. However, the use of the normative net product did not yield the desired results. Why?

First of all, because the replacement of the first indicator by the second was theoretically unfounded and practically inexpedient. Although they consist of the same elements, these indicators are not mutually substitutable. Just as it is impossible to substitute plan (normative) production cost for actual production cost. Normative net production is, in essence, planned labor intensiveness and profitability, whose fulfillment must be aspired to by the collective. And net production is actually newly created value. It may be both greater and smaller than the normative net product.

Secondly, in the process of the price reform of 1982, a diverse level of profitability of products was preserved. And thereby both the normative and the actual net production were converted into a non-objective measure. Similar to "gross output", they became a "rubber meter". The higher the profitability, the more strongly this "meter" stretches and artificially increases the volume of the newly created production. For this reason, the scientific use of net, normative net, and fixed net (net + amortization) production presupposes a single level of profitability, at the minimum in the industry. This has already been done in the GDR, as a result there has been a substantial increase in the level of the reliability of these indicators. At the same time, in the models of reproduction of K. Marx and V. I. Lenin, a single level of profitability is supposed.



But now let us move on to the evaluation of economic activity. The unfavorable situation that developed as the result of the scientifically unfounded measurement of the volume of the gross national product and the level of labor productivity was aggravated still further by the fact that gross (commodity) production was gradually transformed into the basic evaluation indicator of the work of enterprises and industries. Somebody may object: For the evaluation of economic activity, a system of indicators exists in our country and in it the task with respect to the most important types of production in physical terms has always been and is in first place. At first glance, this is really so. You see, formally the chief evaluation indicator is production output in physical terms (for builders--the turning over of projects by the specified date). But only formally.

But in reality the economic situation of the production collectives, their wages, bonuses and moral stimulation depend fully on the fulfillment of the plan in rubles. If enterprises successfully fulfill the task with respect to the product list (builders turn over projects by the specified date), but in so doing do not fulfill the plan in rubles, they simply become attached among those who are lagging behind and, without credit or assistance of the higher organizations, they cannot provide the collective with wages. Not even to mention bonuses and moral stimuli in such cases. And if they underfulfill the task in physical terms, but fulfill and overfulfill the plan in rubles, the gates to "outstanding workers" and the ranks of "winners" in socialist competition are opened up to them, with all the material and moral incentives resulting from this. After the fulfillment of the plan in rubles, the principle frequently becomes operative: The winners are not judged!

A paradoxical situation was created: Theoretically, both the scientists and the practical workers are unanimous that commodity-money relationships play a subordinated role under socialism. This situation is reflected in the directive documents and has received constant registration in the textbooks. But practically everywhere--from the machine building giant to shops for the repair of household appliances--rubles and only rubles rule. In this situation, the rapid development of specialization and cooperation as one of the most important directions of technical progress leads objectively to the increase of the recurrence of the repeated calculation of materials and semi-manufactures, the artificial increase of the volume of production in physical terms. But in practice, the greater the volume in rubles attained, the higher a new task is given. For this reason, it became increasingly more difficult to fulfill it without the artificial overstating of the volume. The pursuit of high gains at any price gradually became transformed into the goal of economic links. A "bifurcation" of the goal took place. For society, it is advantageous to produce greater use values with the least expenditures, but for the enterprises and industries--the other way around: The greater the expenditures, the better. As a result of such a contradiction between use value and cost, the increase in production efficiency and production quality even in the best years of the development of the economy was not held in high esteem, and at times was simply ignored.

During the period of economic discussion, which preceded the economic reform of 1965, both scientists and practical workers were unanimous in the struggle for the dismissal of "gross production". They convincingly demonstrated the

uselessness of this indicator for the evaluation of the work of the economic links. As a result, it was replaced by a new indicator--the volume of realized production. The latter, while it has some advantages, preserved (just like commodity production) the basic defect of gross production--the repeated calculation of embodied labor. Besides, realized production is determined in current prices, but the rates of production volume and labor productivity must be measured in comparable prices.

The introduction of the achievements of scientific-technical progress, which make it possible to reduce material-intensiveness and labor-intensiveness, and in the final analysis to reduce total expenditures, as before led to regrettable consequences for the enterprises assimilating them: There was a decrease in the rates of the growth of production volume; the level of labor productivity fell; there was a decrease in the wage fund; there was a reduction in the deductions for economic incentive funds; a serious decline in the volume of gross (commodity) production could bring an enterprise into a lower category, which threatened losses of 10-15 percent of the salaries of the entire administrative apparatus. For this reason, the replacement of "gross production" by realization in the role of the basic evaluation indicator was formal and could not assist the increase of production efficiency and production quality.

The pursuit of rubles to the detriment of the quality and quantity of production continued, but the preservation of the principle of planning "from the attained level" accelerated and intensified this process. The developed practice of the evaluation of the work of enterprises and industries pushed the managers into a search for ever new ways of increasing the production volume in rubles, by means of increasing the proportion of the significance of the labor of others in the structure of the output being produced or its rise in prices under various plausible pretexts. The imagination of the search in this direction is surprisingly diverse.

Speaking at the meeting of the aktiv of the Leningrad party organization, M. S. Gorbachev said: "We are faced with a great reorientation of the minds of the managers in this respect. You see, they frequently do not think of the national wealth, not about its physical expression, but about seeing to it that the article would be more expensive, that a little more would be twisted in it, in order to pursue one and the same thing within the association and twist "gross production". As a result, "gross production" grows in money terms, but there is a shortage of commodities, articles, and equipment. And we need appropriate equipment and concrete consumer goods.

Now we have very great "experts" in order to solve the problem of rates. Through new prices, let us say, through an increase in the average price of an article, through some kind of addition of the index to extract additional volumes or simply to pursue the same thing, the same article within one association. And you see, there is an increase of rates in one or another association. (Footnote 5) (M. S. Gorbachev, "Nastoychivo dvigatsya vpered. Vystupleniye na sobranii aktiva Leningradskoy partynoy organizatsii 17 maya 1985 goda" [To Move Forward With Persistence. Speech at the Meeting of the Leningrad Party Organization Aktiv on 17 May 1985], Moscow, Politizdat, 1985, pp 19-20).

Materials about the concrete ways of such "twisting of gross production" and increasing the rates of production "growth" and labor productivity are regularly published in the press. Let us recall only the basic ones.

The first way of such twisting is the expansion of the repeated calculation of embodied labor. In PRAVDA, in the article "The Journey for. . . the Plan", it is told in detail how millions of rubles of realization are twisted under the guise of specialization by means of the prolongation of the technical chain of the manufacture of a crankshaft and gear-wheel. There are hundreds of millions of such gear-wheels, rollers, and cylinders travelling about the country, and billions of rubles are twisted that "increase" the volume of realization and "raise" labor productivity.

Finished machines also take an active part in the journey for the plan. Let us take, for example, the Chelyabinskiy Plant for Road Machinery imeni Kolyushchenko (any other road machine building plant may be named equally well). Thousands of tractors are supplied here. They fasten a scraper shovel or bulldozer scoop on them and add the cost. . . of the tractor. As a result, the volume of the plant's realized production attained 280 million rubles, but the newly created, i. e., the net production was approximately 20 million. At this one plant alone, the ministry has a quarter of a million of "flimsy gross production" and "realization". Another example. The chassis of the Moscow Automobile Plant imeni I. A. Likhachev are driven to the Mytishchinskiy Machine Building Plant, and those of the Kama Automobile Plant--to Bashkirya to the Neftekamskiy Dump Truck Plant. There they install bodies on them and add to them the cost. . . of the chassis.

Of course, the Ministry of the Automotive Industry, the Ministry of the Road Machine Industry and other machine builders are not an exception in this matter. In PRAVDA a series of materials has been published concerning how the metallurgists throw millions of tons of metal among the combines for the sake of the increase of realization. The result is on hand: In 1983 and 1984, the Ministry of Ferrous Metallurgy was deficient millions of tons in the delivery of rolled metal and hundreds of thousands of tons of pipe, but the plan of realization was overfulfilled. The former Agricultural Equipment Association also attained serious "successes" in this matter.

But all of this expansion of the repeated calculation of embodied labor is, so to speak, retail. In recent years, it has increasingly actively gone through wholesale. To this end, the associations "are splitting". Thus, the Rayon Fiber Shop at the Shchekinskiy Chemical Combine was converted into a Rayon Fiber Plant and, with one stroke of the pen, the volume of realization was increased by 25 million rubles, although not a penny's worth of real production was added!

The second way is the rise in prices of the production being turned out by virtue of the assimilation of new models and the increase of the material-intensiveness of production. Thus, a KTM streetcar in 1965 cost 15,000 rubles, but in 1980--38,000. Its capacity increased by 13 percent, but its price--by a factor of 2.5. Frequently prices increase in general without an increase in productivity and the improvement of the technical parameters of machines and equipment. The rise in prices of new models of products compared to their analogues has become a mass phenomenon. Those enterprises, which "by way of exception", utilizing the fruits of technological progress, produce inexpensive novelties, find themselves in a difficult economic situation.



And, finally, the third basic way is the expansion of the expensive assortment by means of the reduction or washing of the cheap assortment. Thus, in the PRAVDA article "No Longer Sold", it was noted that, in spite of the increase of the output of men's socks in Uzbekistan, they were no longer sold at one time. Why? Because they sharply decreased the output of cotton socks, producing more synthetic ones, which accumulated in the warehouses. The former and the latter are manufactured on the same machines and with identical labor expenditures. But the synthetic material is three times as expensive. As a result, the plan of realization was exceeded, but the customer remained without the socks he needed. But the collective received wages and bonuses in full and on a legal basis. To the extent that the wage fund depends on the volume of gross (commodity) production or the normative net production without regard to the labor-intensiveness of the production actually being turned out, to that extent the process of the washing of cheap, but labor-intensive articles receives increasingly broad dissemination.

All ways of going after rubles have led to the steady growth of the gap between the production in money terms and the cost of the production actually being turned out. The volume of the gross national product has already attained 1 trillion 260 million rubles. But this sum does not and, by its essence, cannot express the value of the volume of production. Why? First of all, because the sum of the repeated calculation of the objects of labor, which in the structure of material expenditures (without amortization) comes to approximately 80 percent, has nothing in common with the value of the national product.

Secondly, according to Marxist-Leninist theory, value is determined only by the quantity of labor or the quantity of work socially necessary for its manufacture. Analyzing the processes of the increase of value, K. Marx wrote about the fact that there must not be a place for the inexpedient use of raw material and means of labor, because irrationally expended material and means of labor represent superfluous expenditures of the quantity of labor, consequently they are not taken into account and do not take part in the formation of the value of products. For this reason, the sum of the artificial rise in price of use values also must not be included in the value.

And, finally, thirdly, we must take into account the important remark of K. Marx concerning the fact that use value is realized only in the process of consumption. This means that tens of billions of rubles, which are frozen in above-norm supplies and unfinished production, represent nothing else than irrationally expended material and means of labor. They did not become use value and therefore do not take part in the formation of value, but are fully paid for and are included in the volume of the gross national product and in the appropriate proportion in the national income. In the end, these irrational expenditures not only "are not" the result of "squandering", but they even play an active role in the "increase" of labor productivity, the "reduction" of the material-intensiveness of production, and, in the final analysis, in the "increase" of the economic efficiency of national production.

Thus, if all of this is taken into account in the determination of the real value of the total national product, it appears to be significantly smaller than the value of the gross national product. For this reason, a number of calculations of production efficiency, as well as some value indicators and

and norms based on the gross national product, are similar to a compass that has gone bad or to a curved mirror: Squandering is sometimes represented as efficiency.

An example of such "efficiency". In January 1985, a number of central economic departments approved an instruction concerning the economy and rational use of raw materials, fuel and energy, and other material resources. According to it, the economy of material resources is determined by means of the calculation of their expenditure per 1,000 (1 million) rubles of commodity production. This means, if the enterprise will raise the price of its production (increasing its material-intensiveness), the increased expenditure of material resources, and, consequently, squandering, will be disguised by the growth of the volume of commodity production. Since in the structure of commodity production the sum from the repeated calculation of the value of the objects of labor significantly outstrips the value of the objects of labor actually being used (during 20 years, the value of the objects of labor really involved in production rose by a factor of 1.8, but the sum of their repeated calculation--by a factor of 3), the growth of material-intensiveness according to the reports looks like a reduction of the expenditure of material resources per 1 ruble (1,000, 1 million) of commodity production, which is strongly stimulated materially and morally.

The main task of the 12th Five-Year Plan consists in increasing the rate and efficiency of the development of the economy on the basis of the acceleration of scientific-technical progress, technical reequipment and reconstruction of production, the intensive use of the created production potential, the perfection of the system of management of the economic mechanism, and in the achievement, on this basis, of the further advance of the well-being of the Soviet people. For its successful fulfillment, it is necessary to turn from the "expenditure" [zatratty] path of development, which dooms the economy to stagnation. Up to now, the turn in this matter is being realized slowly. In our view, this is indicative of the fact that some people are adopting a wait-and-see position. Some managers still have the faint hope: Perhaps we will restore the old mechanism a bit, and, perhaps, a "second wind" will begin. But this cannot happen. During the period of extensive development, when production output increased through the construction of new plants and the growth in the number of workers, they said correctly: They require greater results and greater expenditures! At the present time, the situation is opposite: The created production potential, taking into account the achievements of scientific-technical progress, makes it possible, with the same expenditures, and frequently even with their reduction, to increase the output of high-quality production.

The increase in the rates of economic development, when they are determined on the basis of the gross national product, does not encourage, but at times counteracts, the acceleration of scientific-technical progress. You see, the introduction of its achievements leads to the lowering of public production expenditures, as a result of which there will be a steady "fall" in the volume of production, a "reduction" in the level of labor productivity, and, consequently, also production efficiency. According to our view, national income, i. e., the value newly created in one or another economic link, must become the scientifically based measure of the volume of the volume of production, which will be conducive to a real acceleration of socio-economic development.

Theoretically, all are unanimous about the fact that national income is the chief indicator of economic development, which is actually not being used in economic practice. At the present time, it is calculated post factum on the level of the national economy by means of the subtraction of material expenditures from the gross national product. But what is the volume of newly created production on the level of the enterprise (association) and industry? Such calculations are not made.

In our view, it is necessary to determine the volume of net production from the enterprise to the national economy. This will make it possible to determine the contribution of the economic links at all levels to the volume of the national income. The transformation of net production into a single all-round indicator will serve as a scientific basis also for the measurement of the productivity of public labor at all levels of management. Before the aktiv of the Leningrad party organization, M. S. Gorbachev said: "We must basically go over to the consideration of productivity on the basis of the national income. And the national income is the greater, the smaller the expenditures not only of living, but also objectified labor. This is how already Marx put this question, and this is how Lenin also put it." (Footnote 6) (M. S. Gorbachev, "Nastoychivo dvigatsya vpered. Vystupleniye na sobranii aktiva Leningradskoy partiynoy organizatsii 17 maya 1985 goda", Inexorable Progress. Speech at the 17 May 85 meeting of the Leningrad party organization aktiv" p. 19).

If we add to the national income the sum of amortization, we will receive the dynamic of the final national product from the enterprise to the national economy. On the basis of an analogous indicator in world practice, the volume and rates of the national product are calculated. If we add to the final national product the value of the objects of labor really involved during the year, taking into account the differences of the working capital at the beginning of the year, we will obtain the total national product [sovokupnyi obshchestvennyy produkt], which includes all expenditures, but excludes the sum of repeated calculation. In this connection, some economists express the fear that the exclusion of the sum of repeated calculation from the value of the national product will lead to a sharp reduction in the rates of economic growth. This is a profound error. On the contrary, the exclusion of the sum of repeated calculation from the base for the determination of the rates of socio-economic development makes it possible to prevent their artificial understating. Calculations show that the calculation of the production growth rates, not on the basis of the final, but on the basis of the gross national product artificially understated them in the 11th Five-Year Plan by 2.6 percent, for two five-year plans--by 7.2 percent, and for 20 years--by 16.5 percent.

But the chief advantage of the national income and the final national product as the measure of the contribution of all links of the national economy to the creation of use values lies in the fact that the reason for the pursuit of gain to the detriment of the indicators in physical terms is eliminated. The reduction of material-intensiveness and labor-intensiveness will not, as now, "drive" producers "into a corner", but give them additional resources for increasing the national income.

In the draft of the new edition of the Program of the CPSU it is stated that the fuller satisfaction of the requirements of society with the least expenditures of all types of resources is the indisputable law of socialist management,



the basic criterion for the evaluation of the activity of industries, associations and enterprises, and all production cells. The experience of the 10th and 11th five-year plans convincingly demonstrates that, until we do not give up using--for the measurement of the contribution of the economic links to the creation of the national product--indicators that include the repeated calculation of embodied labor and do not make national income the all-round indicator, the practical realization of the program provision cited above appears difficult.

For this reason, we propose to write in Part XIV of the Basic Directions in the place where the improvement of the system of plan indicators is discussed: "To use indicators excluding the repeated calculation of embodied labor for the measurement of the contribution of economic links to the creation of the total national product. To introduce the indicator of national income on all levels of management. To increase the role of physical and labor indicators in the practice of management."

In the new system of the evaluation of economic activity, in our view, we should use, above all, the task for the output of the most important types of products and the volume of realized production, taking into account contract obligations. Formally, these indicators, as has already been noted, are also used at the present time, but in the process of evaluation their role is small. It must be raised sharply. Now the wage fund depends on the volume in rubles of (gross) commodity or normative net production. For this reason it is precisely they which determine market situation.

To put a stop to the pursuit of value indicators and to achieve a real increase in the role of physical and labor indicators, the wage fund must depend directly on the quantity of actually produced output, taking its labor-intensiveness into account. To this end, the "double bottom" in the calculation of the fulfillment of contract obligations must be eliminated. Its essence lies in the fact that many collectives, in breaking contract obligations, overfulfill the plan for realization. As a rule, this is done through deficiencies in deliveries of inexpensive, but labor-intensive articles and above-plan production of expensive, material-intensive types of products, a significant part of which accumulates in the warehouses. For this reason, the sum of total realization must correspond to the volume of contract obligations.

Here it is exceedingly appropriate to recall that the instruction approved by the USSR Central Statistical Administration, by agreement with the USSR Gosplan and the Ministry of Finance (dated 19 April 1981), provides for the exclusion, from the volume of realization, of the value of production underdelivered above the contract volume or production of non-envisaged assortment. It is necessary to return to this document. As it turns out, the directive documents, normative acts and progressive initiatives, even those approved from above, if they counteracted the pursuit of the increase of volume in rubles, as a rule, "wore themselves out on the obstacles" and gradually fell into oblivion.

But if the task in regard to the volume of the most important types of production and contract obligations are successfully fulfilled, this still does not mean that the collective is working well. Indicators and norms are similar to instruments and gadgets. Each one of them must be used in accordance with its



purpose. Attempts to find a universal economic indicator for the measurement and evaluation of production activity have not produced and cannot produce anything useful.

For the objective determination of the economic state of an enterprise (association) the "clinic system" [dispanserizatsiya] is needed, in the process of which we must explain in addition: How are the fixed production capital and working capital utilized? Is the material-intensiveness and labor-intensiveness of production being lowered? What are the dynamics of production cost? Are there no claims for replacement of goods, are they not accumulating in the warehouses, and many other questions connected with the specific nature of the industry. The implementation of such a "clinic system" without the real increase in the role of physical and labor indicators and norms is impossible.

However, the increase in the role of natural and labor indicators must not be regarded as an underestimation of value indicators. The roles and functions of physical, labor and value parameters of production are different. Supplementing each other, being rationally and harmoniously combined, they are called upon to become a reliable "adviser" in the matter of the selection of the most optimal variant for the solution of the tactical and strategic tasks of economic construction. Figuratively speaking, value indicators must stand firmly "on the shoulders" of physical and labor indicators, but not "hover" on a "flimsy production volume". Given this condition, they, like a compass, are capable of indicating the closest path to the final goal--the fullest satisfaction of the requirements of society with the least expenditures.

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## INVESTMENT, PRICES, BUDGET AND FINANCE

### GOSBANK'S ROLE IN SPEEDING UP TECHNICAL PROGRESS VIEWED

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[Article by I. V. Levchuk, deputy chairman of the Board of Governors, USSR Gosbank: "Gosbank in Resolving the Task of Accelerating Scientific-Technical Progress"]

[Text] In June 1985 a conference on questions of the acceleration of scientific-technical progress was held at CPSU Central Committee. At that conference a report was given by General Secretary of the CPSU Central Committee M. S. Gorbachev. In his report and in statements in Leningrad, Kiev, and Dnepropetrovsk, the ideas of the April 1985 Plenum of the CPSU Central Committee received their concretization and development. The changeover of the economy to methods of intensification and the complete use for that purpose of the achievements of scientific-technical progress must become a nationwide matter, and the pivot of our work at all levels. The question that was put on the agenda involves the new quality of work, the changeover to intensive methods of development, the rapid movement ahead in the strategically important areas, the structural reorganization of the economy, the use of effective forms of administration, organization, and incentive systems for labor, and the more complete resolution of social problems. These principles determine the chief direction in the work of the bank system for a prolonged period of time.

The Soviet state carries out an investment and structural policy with the aid of planning, economic, and financial agencies. By virtue of the functions inherent in it, USSR Gosbank handles almost half the funds being invested. It finances and provides credit for capital investments in the agroindustrial complex, the annual volume of which comes to 44 billion rubles, and grants credit in large amounts to other branches of the economy in excess of the limit for state capital investments. Gosbank carries out extremely significant operations in the use of the money in the depreciation fund; it finances expenditures for capital repair in almost all branches of the economy (the contract organizations of the construction ministries served by USSR Stroybank constitute an exception). The total amount of these expenditures reaches 40 billion rubles (Footnote 1) (Strictly speaking, the expenses for capital repair are not capital investments. The latter are understood as expenditures for the creation of new fixed assets and the remodeling of existing ones, while capital repair presupposes only their

restoration. However, science and practice confirm the desirability not of the simple restoration of worn-out machines and machinery, but also their modernization, the technical improvement of fixed assets on a new basis). Thus, USSR Gosbank, in the process of its activity, is linked extremely closely with the investment process and the government's structural policy, and is one of the agencies that implements that policy.

The workers in institutions of USSR Gosbank must make the proper conclusions from the tasks that have been posed at the present-day level in party documents and must carry out work in the following directions.

It is necessary to strive for and to promote actively the observance of proportionality in the development of the branches and subbranches, the optimal correlation of capital investments in the resource-extractive, processing, and consuming branches. Of course, the State Bank cannot determine all the directions in that work. This falls primarily in the competency of USSR Gosplan and other agencies of economic management. However, Gosbank also can do a lot by promoting, by means of the economic levers that it has at its disposal, the implementation of the directives formulated by the party.

The bank has at its disposal broad opportunities for providing incentives for the technical re-equipping of the branches of the economy and enterprises, and for the development and introduction of new technology. It can work more actively to help improve the entire sphere of capital construction -- the intensified concentration of capital investments, the reduction of the periods of time required for construction, the preventing of unjustified, uncompleted construction, and the increasing on that basis of the effectiveness of capital investments.

If one speaks about promoting the proportional development of the branches of the national economy, then the bank's considerable opportunities can be implemented in the process of planning work, and also the financing and providing of credit for the agroindustrial complex. In the agroindustrial sector of the economy, a tremendous potential has been created, but the return on that potential has been insufficient so far. One of the reasons for this, as was noted at the conference at the CPSU Central Committee, is the weak concentration of resources in the decisive sector, the lack of proportionality in the development of individual branches.

For example, the ministries of the fruit and vegetable industry in a number of union republics have at their disposal large capacities for the storage of potatoes, vegetables, and fruits, and for the processing of various agricultural products. But there are still insufficient capacities for the complete storage of the collected products, their processing, and their delivery to the consumer. In certain republics the production areas that have been intended for this purpose make it possible to store only part of all the agricultural products that have been collected. Under those conditions the fruits and vegetables for supplying the public are stored in areas that have not been designed for that purpose. Of course, with the job set up this way, it is complicated to preserve the harvest. Gosbank institutions must not reconcile themselves to this state of affairs. They have at their disposal a

sufficiently powerful arsenal of economic levers for promoting the development of the branches that have become a bottleneck in the national economy.

Shortcomings in the development of individual branches of the agroindustrial complex can be seen when one analyzes the status of interfarm organizations. Those organizations are provided long-term credit in large amounts for the construction of large-scale animal-husbandry complexes, but when that kind of construction was being planned, the agricultural agencies did not prepare the documentation properly and the State Bank institutions failed to monitor the projects that were accepted for the granting of credit. No consideration was made of the opportunities for providing those complexes with young animals, fodders, and other resources. As a result, many complexes have failed to achieve the rated capacity and high production costs have developed. For that reason several of the complexes proved to be operating at a loss, and the return of the credit by the established deadline proved to be unguaranteed.

The State Bank must participate more actively in the planning of capital investments, the concentration of them at projects slated for activation in the next reporting period, and in the proportional development of the branches of the economy, primarily the agroindustrial complex. At the same time it is necessary to use the financial resources in the investment process with a higher rate of results.

Gosbank institutions take part in forming the capital investment plans, the master lists, and intrasite master lists, and carry out purposeful monitoring of the rate of formalization of the financing of the agroindustrial measures. In the process of that work, they carry out the necessary steps to guarantee the concentration of capital investments in the construction sites and projects slated for activation in the next reporting period, as well as the carryover ones. On recommendations made by Gosbank institutions, more than 15,500 newly begun projects with an annual volume of capital investments of 355 million rubles were removed from the draft of the current year's plan. The funds thus made available were channeled into the completion of projects that were previously begun, and that made it possible to increase the activation of the fixed assets, as compared with the established assignments, by 988 million rubles, as against 815 million rubles in 1984.

At the same time, the shortcomings that have been repeated from year to year have not yet been eliminated at the stage of formalizing the financing of capital investments. The construction of newly begun projects sometimes are provided with capital investments with a violation of the established norms for the duration of the operations to be carried out, and this leads to the freezing of funds in uncompleted construction. In 1985, for 9000 projects included in the plan, the amount of appropriations was 426 million rubles less than was required on the basis of the norms for the duration of construction. For example, with a norm of 1.5 years, the hothouse combine at the Moldavian Mayak Sovkhoz has been under construction for more than ten years.

The dispersion of capital investments in many construction sites that are newly begun and that are not being handed over for operation for a prolonged period of time is observed chiefly for projects with an estimated value of up to 3.5 million rubles. The master lists for these projects are approved by



the Councils of Ministers of the union republics, the ministries, and departments, or in the procedure that has been established by them. The republic offices of the bank work in contact with them.

The Board of Governors constantly requires of the State Bank institutions that they establish a reliable roadblock to violations of state planning discipline in the area of capital investments. However, a number of institutions have not succeeded in overcoming local-interest tendencies that lead to the violation of investment policy. One can no longer leave this practice without any consequences. The bank must completely implement the party's instructions with regard to the carrying out of technical progress. Instances of the violation of investment policy must be completely eliminated in the outlying areas. But if one does not succeed in doing that, they must be considered at the republic offices, the Board of Governors of State Bank, and the Soviet and economic agencies. By this process the bank will actively promote the implementation of the planned assignments.

It is necessary to intensify the bank supervision of the carrying out of capital investments. The fact of the matter is that certain institutions, after reporting to the customer that financing for various projects has been refused because of violations of plan discipline, consider that their tasks have been fulfilled. But that is only the beginning of the work. It is necessary purposefully and consistently to strive for the reworking and reapproval of the plans and master lists. Every instance of violation of state planning discipline in the area of capital investments by Gosbank institutions must be given a well-principled evaluation and the necessary steps must be taken to correct the situation.

At the present time there has been an increase in the importance of the target use of capital investments in agriculture. The Gosbank institutions take this into consideration and have been increasing the intensity of their work. Bank audits, including those carried out jointly with agencies of the people's control, reveal instances of construction that has not been included in the plan. This inefficient use of public funds is inadmissible. It is necessary to reinforce state planning and financial discipline in construction in the light of those requirements that are made by scientific-technical progress and to close off all channels by which labor and material resources can be diverted for the construction of projects not included in the plan.

Major capabilities for accelerating the introduction of the modern achievements of science and technology into production are present in the system of granting credit for expenditures for fixed assets in excess of the limits for capital investments. The bank has accumulated a rather large amount of experience in providing credit for projects of that kind. Their activation promotes the improvement of the technical level of production, as well as the additional production of consumer goods.

Gosbank will have to play an important role in implementing the program that has been developed in conformity with the decisions of the 26th party congress on the Comprehensive Program for the Development of the Production of Consumer Goods and the Services Sphere in 1986-2000. That program stipulates the

carrying out of major measures to assure the more complete satisfaction of the needs of Soviet citizens.

During the first four years of the current five-year plan, by means of credit in the total amount of 3.5 billion rubles, measures were carried out which, in addition to the plan, provided commodities valued at 8.5 billion rubles and profit of almost 2.5 billion rubles. Those are good results. However, large reserves still exist. It is necessary to select more carefully those measures which are applied to the granting of credit. The factor that must serve as the selection criterion is the effectiveness of the measure, the obtaining of the best result from the point of view of the intensive development of the economy. That is what the Comprehensive Program's goal is.

A considerable field of activity for the State Bank is provided by the financing of capital repair. At the conference at CPSU Central Committee it was emphasized that, because of the aging of the production assets, the sphere of capital repair has swollen excessively. The carrying out of repair currently requires almost one-fifth of the ferrous metals; and repair shops have one-fourth of the pool of machine tools and 6 million workers. The task has been posed to develop a program of remodeling for every enterprise, every branch. By the end of the 12th Five-Year Plan it is necessary to renew a considerable part of the production apparatus and to have as much as 50 percent of new technology in its makeup. This requires, to a certain degree, the switching over of depreciation funds; they must be used to a greater extent for the modernization of the equipment and the introduction of new technology, rather than for the repair of that which is broken down or obsolescent. This will resolve the problem of the more efficient use of the depreciation fund in the interests of scientific-technical progress.

The State Bank participates in the resolution of this task. Its institutions have been given instructions concerning the procedure for financing expenditures for the remodeling and modernization of large-scale metallurgical units during the capital repair of the basic shops and enterprises in ferrous metallurgy by drawing on the depreciation deductions intended for capital repair. For purposes of expanding the rights and independence of the enterprises in ferrous metallurgy, it has been stipulated that the financing of those expenditures will be carried out from the settlement accounts of the enterprises. Supervision of the correct expenditure of funds for those purposes has been made the responsibility, respectively, of USSR Minchermet [Ministry of Ferrous Metallurgy] and UkSSR Minchermet. Of course, State Bank also carries it out.

At the conference at the CPSU Central Committee, a question that was sharply raised was the question of the development of machine-building, which has a key role in the re-equipping of the national economy and in the carrying out of the scientific-technical revolution. Over a prolonged period of time, insufficient funds have been allocated to machine-building, and that has given rise to a number of disproportions in the development of the branches that are linked with it. In this regard the task was assigned of increasing in the 12th Five-Year Plan the capital investments in the civilian branches of machine-building by a factor of 1.8-2. It is planned to carry them out, in

particular, by drawing on the partial redistribution of funds from the other branches.

Gosbank must direct its work toward the resolution of the task that has been assigned. The most serious attention must be directed to the reinforcement of the financial status of machine-building; to the development of currently applicable criteria for evaluating the results of the economic-financial activity of the enterprises and associations in that branch; to the search for intra-economic resources for the purpose of reinforcing their financial status; to the improvement of the organization of the granting of credit and of making settlements; and also to increasing the monitoring of the carrying out of those measures for intensification which must be carried out by the associations and enterprises in machine-building.

In this branch a rather large number of problems that require resolution have accumulated. We would like to cite certain data. In 1984, measures of economic influence were applied to 72 percent of the enterprises in the machine-building industry, with the number of those measures almost doubling in recent years. On the average, two measures of economic influence were applied to each enterprise. However, the rate of results of those measures was insufficient. The changeover of the enterprises to special conditions for the providing of credit did not always yield the desired effect. And that, of course, has its reasons.

On the one hand, this situation is explained by the certain imperfection in the differentiated conditions for granting credit. There exist a large number of indicators for the nonfulfillment of which the special conditions are applied in full or partial volume. The effectiveness of this measure is reduced as a result of the fact that there has been no definition of the degree of fulfillment of individual indicators which can result in the application of various sanctions. This creates the prerequisites for the formal application of sanctions and the insufficient directedness of the measures which are used as part of the special conditions for the granting of credit.

There have been, for example, instances when an enterprise that has fulfilled contract shipments by 99.5 percent and that has other good indicators has been changed over to the special conditions for the granting of credit, and for a prolonged period of time. For example, for approximately two years the Industrial Branch of Gosbank, Stavropol Kray Office, applied the special conditions for the granting of credit to the piston rings plant because of a shortage of its own working capital, which shortage constituted only 2 percent of the norm for the enterprise's own working capital. Moreover the question of the making up of the shortage of the enterprise's own working capital was not raised promptly.

The present-day economy and the mechanism of administering it require the decisive eradication of formalism in the bank's economic work, a more thorough analysis of the activity of the enterprises, and a well substantiated approach to converting them to the special conditions for the granting of credit and the application of other sanctions.



This also pertains to the workers in industry. Their formal attitude to the bank's requirements and the slow elimination of shortcomings in the organizing and planning of production and the financial activity of the enterprises have not been promoting the improvement of the work or the removal of the sanctions. There has also been an extremely weak reaction to these requirements by the ministries and the VPO [all-union production associations], and this only prolongs the application of sanctions to their subordinate production associations and enterprises. For example, the special conditions for the granting of credit have been applied for more than two years to the Elektrobytmash Production Association in Rostov-na-Donu, to the Nerkhinskptitsemash Plant, the Dinamo Production Association, and other enterprises. This is explained by a number of reasons, including the insufficiently active and profound working out of the questions by the economists.

It must be admitted that, on the one hand, those sanctions that are needed for the elimination of the particular shortcoming are not always applied. On the other hand, the economic work is not carried out firmly and purposefully in all instances. While imposing sanctions for the nonfulfillment of certain indicators, we allow ourselves to relax with regard to other questions and consequently reduce the overall effectiveness of their action. For example, despite the complete removal of credit for a number of machine-building enterprises, the Oktyabrskoye Branch of Gosbank in the city of Petrozavodsk periodically issued them payment and planned credit and loans for the presentation of letters of credit, and offered other benefits without proper justifications for doing so. Of course the results of the sanctions imposed were not great.

All this attests to the fact that it is necessary to intensify the economic work with the enterprises in the machine-building branches. It is necessary, apparently, to re-examine in certain questions our attitude toward the special conditions for the granting of credit and toward the application of sanctions outside of those conditions. If the enterprise's economic-financial activity improves, then the bank should help the enterprise, rather than continuing to apply its sanctions. It is definitely necessary to reinforce the noted positive tendencies in the work of the enterprise in order to improve its financial status.

It would be correct to apply measures of economic influence to the enterprises in proportion to the violations that have been committed. If, for example, an enterprise has a small shortage of its own working capital, then it would be undesirable to remove it completely from granting it credit. It is necessary to make more efficient use of the entire series of measures of credit-and-settlement influence. At the same time it is better to apply fewer sanctions, but to assure a higher rate of results, and to be more persistent in concentrating the efforts of the economic apparatus of the enterprises whose financial status is unfavorable upon correcting that situation, without, of course, overlooking the other enterprises.

An important measure which must always be used actively is the creation of public opinion, an atmosphere of intolerance toward the enterprises that are working poorly. A tremendous effect upon improving the work of an enterprise



can be exerted by the press, the party and economic activists, the consideration of the economic-financial status of the associations at the executive committees and rayon committees, and businesslike contact between the bank institutions and their managers, on the one hand, and the Soviet and party organizations, on the other. These work methods must be put into practice on a broader scale.

The absolutely primary task at the present-day stage of development of the economy is the observance of the strictest economy measures in the expenditure of funds -- economy in the broadest sense. As was emphasized at the conference at the CPSU Central Committee, "the main thing now is the mobilization of the organizational economic, and social factors, the establishment of proper order, the increase in responsibility and discipline, and the improvement of the organization of production and labor, in order to guarantee the best use of everything that our country has at its disposal."

The bank's opportunities for the resolution of this critical task are multifaceted and broad. First of all, more attention must be devoted to the work with the economic agencies in restoring the enterprises' own working capital that has been expended. Many associations and enterprises in heavy, light, and food industry have a considerable shortage in that working capital. Credit for the temporary compensation of the shortage of own working capital, which credit is issued on terms of credit agreements, would promote the normalization of their economic activity, and therefore it would be desirable for Gosbank institutions to develop the work in this direction.

The work of reducing the reserves in excess of plan must also be carried out with greater intensity and a higher rate of results. As of 1 April 1985, the above-norm balances of commodity and material assets for which credit has not been granted, including those in industry, had reached a considerable size. Moreover, 50 percent of those reserves are at enterprises that are subordinate to union-republic and republic ministries.

The assignment for the involvement of above-plan reserves in circulation for the first four years of the five-year plan was not fulfilled by all the economic agencies. As a result, instead of involvement in circulation, the economic agencies withdrew from circulation assets with a considerable total value. One's attention is drawn by the fact that the reserves include a large quantity of immobile material resources, that is, their structure does not correspond to the production needs. The above-plan balances include ready output which has not been selling, and raw materials that have not been moving and are not being used, including those that do not pertain to the particular type of production. The Gosbank institutions must take all steps to encourage the activity of the economic agencies to mobilize the material assets, and to include them in beneficial economic turnover. The State Bank, working in direct contact with every economic agency, has broad opportunities for exerting an economic effect upon them. It is necessary to take more care in preparing the recommendations for the resolution of the questions that have been raised, to make more dynamic use of the bank's inherent economic levers and methods for stopping instances of the formation of reserves of material assets in excess of plan, and to promote the acceleration of their turnover.

It will be necessary to carry out serious work to implement the direct instruction given by M. S. Gorbachev concerning the tightening up of the system of financing and providing credit for material reserves (Footnote 2) (PRAVDA, 7 September 1985). Obviously it will be necessary to take this point of view in examining the entire system of bank credit.

Gosbank is confronted by a vitally important task of carrying out and guaranteeing a resource-saving economic policy. Considerable reserves exist to resolve this task. In recent years, as a result of the slowing down of the turnover rate of working capital, there has also been a slowing down of the turnover rate of credit. For that reason alone there has been a serious increase in credit investments. For example, in UzSSR during the past ten years credit investments have increased by 7 percent; KaSSR, 8; GSSR, 9.7; AzSSR, 8.2; and TuSSR, by 10.6 percent. It is necessary to stop the use of credit to cover the slowing down of the turnover rate of capital, and to strive for the acceleration of the turnover rate of resources.

It is necessary to examine more thoroughly the requests made by economic agencies for the granting of credit and to increase the responsibility borne by bank institutions at all levels for the economic use of the credit resources. At the present time, if any republic ministry requests the Board of Governors of Gosbank to grant credit for various purposes, as a rule the appropriate office, without the necessary economic substantiation, supports those requirements. This pertains, in particular, to the Armenian SSR and RSFSR offices, which always support the requests for allocation of additional credit to kolkhozes and sovkhoses, light and food industry, and other branches of the economy. A similar situation is observed in the KaSSR office, which also supports all the requests made by KaSSR Minlegprom [Ministry of Light Industry] for the granting of credit, although the associations (enterprises) of that ministry have accumulated large reserves of ready output and raw materials that have not been moving.

The time has come to put an end to the practice when, by way of an exception, considerable amounts of credit are issued in order to pay the suppliers' bills or to pay wages. For example, in 1984 the carpet factories in the local industry of Turkmenia made 74 requests to issue loans for the purpose of paying wages. Those loans were granted to them by way of an exception, and yet the factories had a large amount of overdue indebtedness, and several of them had had further credit disapproved. Despite that fact, they were issued loans in the amount of 6.6 million rubles. Nor has the situation changed in 1985. The factories continue to receive credit, which is not returned on time. One can cite other examples of the inefficient use of funds and of a nonstate approach to the matter. The bank is supposed to issue money only for effective measures and only in those instances when the money can be efficiently used and its return to the state is guaranteed.

An objective indicator of scientific-technical progress is the quality of output. In this regard, as was noted at the conference at CPSU Central Committee, there have been changes for the better. However, it was admitted that quality, the technical-economic and esthetic level of the articles, is one of the most vulnerable spots in the economy, and the source of many difficulties and problems. Gosbank institutions must intensify their

influence upon improving the quality of output. All the levers for this influence -- credit, settlement, etc. -- must be put into action. In addition, it is necessary to think about other measures.

The changeover of the economy to methods of intensive development can be carried out only provided there is improvement in administration. The fundamental essence of the reorganization of economic administration has been defined in the decisions and materials of the 26th CPSU Congress and the subsequent Plenums of the CPSU Central Committee. It consists in the increase in the effectiveness of the centralized principle in administration and planning, in the considerable expansion of the economic independence and responsibility of the enterprises and associations, and in the energetic use of more flexible forms and methods of management, cost-accountability and commodity-monetary relations, and the entire arsenal of economic levers and incentives.

Since the beginning of 1984, a broad-scale economic experiment has been under way in industry. As the conditions for conducting that experiment are worked out, new branches are included among the participants. Those conditions presuppose the expansion of the rights and the increase in the responsibility for the results of work on the part of Gosbank institution managers also. Otherwise the rights of the enterprises cannot be implemented and their responsibility cannot be increased. It is necessary for Gosbank to take more energetic steps to improve the forms and methods of credit-and-settlement services for the economy in conformity with modern requirements. The work on this problem must be done by everyone -- the central apparatus, the republic offices, and the other bank links.

A question that has been taking on considerable immediacy at the present time is the question linked with the bank's monitoring of the expenditure of the wage fund. Practical life has shown that this monitoring is not yet sufficiently effective. For a number of branches in industry, the increase in wages is outstripping the increase in labor productivity. Therefore the bank workers must participate in a more meaningful manner in developing the methodological instructions for the formation of the wage funds and the material incentive funds in those branches of the economy which are being changed over to the new management methods. It is necessary to strive for a situation in which wages reflect the labor expenditures, and are truly earned. Only then will it be possible to establish the correct correlation between the growth rates of wages and labor productivity and to monitor them with a high rate of results. It is necessary also to think a bit about creating a mechanism that prevents the overexpenditures of wage funds. Obviously, a role that encourages their elimination would be played by the payment of those overexpenditures by drawing on the material incentive fund of the enterprise or production association.

This work takes on special significance and concreteness as a result of the fact that it has been stipulated that the industrial ministries and production associations and enterprises that are working under the new management conditions will have established for them a normative correlation between increases in average wages and labor productivity. This normative indicator will be applied in all branches of industry. Consequently, the bank workers



are receiving an important lever for the more effective monitoring of the expenditure of the wage funds.

At the conference at CPSU Central Committee, one of the topics discussed was the increase in the contribution made by science to the acceleration of scientific-technical progress. Some of the problems that have accumulated in this area are linked with the work of Gosbank.

We have not yet seen the completion of the changeover of most of the NII [scientific-research institutes] to the cost-accountability system of operations, which presupposes the rejection of the formation of working capital by drawing on the customer's advance payments, although it was planned to complete this changeover in the 11th Five-Year Plan. For that reason, the credit for scientific developments has been used weakly. In addition, the mechanism for the granting of credit has become more complicated, and the issuance of loans involves a tremendous amount of various papers and documents, and this can scarcely make the participation of credit in scientific developments sufficiently viable. It is necessary to analyze thoroughly the practice of granting credit to a scientific-research institute and on that basis to take steps to intensify the influence of the credit-and-settlement levers on the development of scientific-research projects and the accelerated introduction of new technology into the economy.

Critically important tasks also confront the bank with regard to the improvement of the mechanisms of the granting of credit, financing, settlements, and savings matters. This work must be conducted on the basis of the broad use of modern technology and electronics, and the re-examination of the firmly established principles, forms, and methods of daily activity which have become obsolete and are hindering the development of credit relations. We have in mind the carrying out of the consolidation of the objects to receive credit; the reduction in the number of personal and balance-sheet accounts on which the issued loans are taken into consideration; and the improvement of the criteria for differentiating the interest rates. At the present time, in the basic branches of the national economy, there exist nine norms for interest rates: from 0.5 to 10 percent. At the same time the possibilities for maneuvering them by the Gosbank institution managers are limited by the instruction manuals. The question arises concerning the normalization of the number of interest rates. Obviously, it would be desirable to establish a basic interest rate for credit provided for planned purposes, and an increased rate for credit that will be used for purposes not specified in the plan. At the same time the right should be given to bank institution managers to differentiate the interest rate broadly (for example, within the limits of up to 30-50 percent of the norm for that rate), and to raise or lower it with the purpose of providing incentive for the work of the enterprises or applying a sanction. Then the interest will not be mechanically applied without the participation of an economist, simply on the basis of the object. The time has come also to resolve the question of the levying of penalty interest to be paid from part of the profit going into the formation of the material incentive funds.

As was noted at the October 1985 Plenum of the CPSU Central Committee by General Secretary of the CPSU Central Committee M. S. Gorbachev, our party is



approaching its next congress, the 27th CPSU Congress, with the concept of the acceleration of our country's social and economic development on the basis of scientific-technical progress. That concept received the warm approval and support of all the Soviet citizens. The appropriate contribution to the resolution of the responsible tasks at the present-day stage of the economy, which tasks have been posed by the party, must also be made by the workers at the State Bank.

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## INVESTMENT, PRICES, BUDGET AND FINANCE

### CRITERIA FOR PRICING NEW TECHNOLOGY EXAMINED

Moscow EKONOMICHESKIYE NAUKI in Russian No 12, Dec 85 pp 91-93

[Article by V. Tarasov, candidate of economic sciences: "Intensification of Production and Price Formation for New Technology"]

[Text] Intensification of social production and improving its effectiveness depend substantially on the quality of the tools of labor which are created and the rates at which production is modernized. As Marx noted, implementing the intensive path of developing production requires the use of more effective means of production.<sup>1</sup>

Solving the problem of creating highly effective tools of labor and truly new technology, which entails revolutionary changes in production,<sup>2</sup> makes it necessary to improve economic organizational forms and methods of managing scientific-technological progress. In solving the issue of the need to produce new technology, one should begin from the criterion of socio-economic utility of its creation, which characterizes in summary form its progressiveness. At present, in accordance with the Methodology (Basic Statutes) For Determining the Economic Effectiveness of the Use of New Technology, Inventions and Rationalizer's Proposals in the Economy, adopted in 1977 and currently in effect, the criterion for the economic effectiveness of the creation and introduction of new technology is the annual economic effect, calculated based on the difference in the relative expenditures for the base and the new technological variants. Practice has shown, and this has repeatedly been noted in the literature, that the annual economic effect calculated by this method is substantially overestimated and does not correspond to the actual price reduction per unit of production (work), manufactured using the new technology, and that the actual results of its introduction turned out to be far from those calculated.

In accordance with the Methodology For Determining Wholesale Prices and Net Output Norms For New Technology, Equipment and Tools For Industrial Engineering (1982) price ceilings essentially must fulfill the role of the criterion for the effectiveness of the new technology. The ceilings are defined according to planning stages for eliciting the economic and social utility of its development, limiting price increases for production, and in order to ensure a relative cost reduction per unit of final useful effect.

However, even given this approach no task is posed for reducing the expenditure of living and materialized labor per unit of production (work), produced using the new technological variant, and there is no economically based mechanism to encourage the enterprise to reduce the expenditure of labor and material resources for the product being manufactured. Under these conditions there is frequently an urge to increase expenditures, and in the final analysis wholesale prices, and, consequently, a distorted impression is created about the results of the economic activity of enterprises.

Under modern conditions the mechanism for replacing living labor with materialized labor has changed. This is related to the lack of alternatives: either bringing into the enterprise additional work force or introducing new technology, which makes it possible to expand production with the same number or even fewer workers.<sup>3</sup>

At present the most characteristic tendency in calculating the economic utility of creating new machinery is the reduction in both living and materialized labor per unit of production (work), by comparison with the old model which is being replaced.

For example, the starting point in calculations of the economic effectiveness of the new KSK-100A-1 self-propelled fodder harvesting combine was data from machinery testing stations, and was based on a reduction in both living and materialized labor. In particular, direct operating expenses for mowing and grinding corn using the new KSK-100A-1 combine were 0.733 rubles per ton, and they were 0.847 rubles per ton for the KSK-100 base machine; for mowing and grinding grasses they were 1.271 and 1.393 rubles per ton respectively; for selecting and grinding sheaths of dried grasses they were 1.776 and 1.885 rubles per ton. With respect to this, a reduction of proportionate capital investments was taken into account. For mowing and grinding corn this amounted to 0.322 rubles per ton; for mowing and grinding grasses it was 0.418 rubles per ton; and for selecting and grinding sheaths of dried grasses it was 0.224 rubles per ton. As a result, the calculated economic savings were 4,700 rubles.

It should be taken into account that the calculated data are in part the result of the ideal conditions under which the new technology was tested. Frequently they are based on average values of expenditure indices, and sometimes hypothetical indices are constructed, which are very far from the real conditions under which the new machinery is used. In the end, this leads not only to increased capital intensiveness of the new technological variant, but also to a lack of savings on current operating expenses, and consequently does not facilitate a reduction in prices per unit of manufactured products (work). Meanwhile, it is precisely such a reduction in summary form which characterizes both the economic and the cost accounting utility of developing the new technology, and thereby eliminates the possibility of the non-equivalent replacement of old machinery by the "new" technological variant. It seems to me that the advantages of the new machinery must be realized, in the first place, through reducing the amortization sums calculated per unit of production (work) produced using this equipment. This expresses the utility of directing capital investments into this technological variant. At the same

time, recently the point of view has taken hold according to which increased capital intensiveness of a new technological variant is compensated for, as a rule, by a reduction in on-going operating costs. This condition actually is fulfilled in doing calculations of the economic utility of producing several types of machinery.

If, in particular, the base and modernized models of the MAZ family motor vehicles are compared, the latter are characterized by increased expenses for amortization (without calculating sales expenses). Thus, the amortization sum for the MAZ-5549 modernized motor vehicle was 1.518 kopeks per km, as compared to 1.438 kopeks per km for the MAZ-503A base model. Correspondingly, the amortization sum for the MAZ-509A modernized motor vehicle was 2.939 kopeks per km, and that for the MAZ-509 base model was 2.877 kopeks per km. Therefore, there has been an obvious increase in the capital intensiveness of the modernized models, which was demonstrated in increased amortization sums per unit of work of the new motor vehicles. However, this increase should be compensated for by reduced operating expenses for the new vehicles. According to calculations, expenses for operation of the MAZ-5549 modernized motor vehicle were 14.66 kopeks per km, and those for the base model MAZ-503A were 14.91 kopeks per km. Corresponding expenses for the modernized MAZ-509A motor vehicle were 24.63 kopeks per km, and those for the MAZ-509 base model were 25.06 kopeks per km.

In this case the summary assessment of savings using the new vehicles results from the reduction in expenditures for living and materialized labor per unit of manufactured product (work), compared to the old technological variant. But for this it is necessary that in the calculations the productivity (capacity) of the new technology not be theoretical, but ACTUAL, REFLECTING THE REAL CONDITIONS OF ITS USE AND THE DETERMINED ACTUAL WORKLOAD OF THE TECHNOLOGY, IDLE TIME, NUMBER AND TYPES OF REPAIRS, AND THE INFLUENCE ON MECHANIZATION AND AUTOMATION OF RELATED TECHNOLOGICAL PROCESSES.

The new vehicles must not only replace more living labor than was spent on their production, and not only facilitate the creation with their assistance of a larger volume of production, but they must also ensure a savings of materialized and living labor, both in this and in subsequent reproduction cycles. This, in particular, means that special meaning is taken on by the saving in materialized labor, which is reflected in the amount of value transferred from the new vehicle to the unit of production (work), which is produced with its assistance, and which influences the value of the reproduction of the accumulated portion of the means of production.

Often the consumer of the new technology does not realize a savings in current operating costs, including for wages, because calculations of savings derive from directly proportionate dependence of current operating costs on the change in the productive capability of the machinery; i.e., the real conditions of their operation are not taken into account. In practice, current costs to the user do not always have a directly proportionate relationship to the increase in the productive capability of the new equipment. The dependence here is more complex.



Thus, the use of new technology which facilitates an increase in labor productivity entails, as a rule, (although not in a directly proportionate dependence) an increase in wages; there is a reduction in the share which wages play in the production costs of a unit of production, manufactured using the new technology and there is a change in the production cost structure. As a rule, this aspect is not taken into account in calculations of savings in current operating costs of new technology.

Meanwhile, the reduction in expenses per unit of production (work) as a summary expression of relative cost reduction for new technology makes it possible to direct the portion of the resources which were economized toward improving the social conditions of production, which in turn has an influence on improving its effectiveness. Therefore, the creation and introduction into production of new technology must be subordinated to the law of economizing working time. Retreating from the requirements of this law leads to the production of technology which is costly in both absolute and relative terms.

In order for expenses for improving the social parameters of new technology to be compensated for through savings on current operating expenses, it is necessary, in our view, to fulfill the following condition:

$$3 > U_c$$

where  $3$  is the economic saving from current costs and the use of the new technology, adjusted to a one time form and reduced by the size of the incentive bonus; and  $U_c$  are the expenses for improvement of the social parameters of the new product, counting the standard profit for the given group of products.

Fulfilling this condition makes it possible, on the one hand, to take into account when establishing prices for new technology the need to improve its social parameters, and on the other hand, to ensure price reductions per unit of useful effect. Thereby, the criteria for the socio-economic utility of the development of new machinery must correspond to the mechanism for the formation of socially necessary labor expenditures (ONZT) [obshchestvenno neobkhodimyykh zatrat truda] for its production.

In solving the problem of the formation of ONZT for the production of machinery it should be taken into account that an ever greater tendency toward narrow article specialization of production is being observed in machine building. As a result, an overwhelming share of functionally interchangeable machinery is being manufactured at one or two enterprises. Thus, narrow article specialization is taking shape in machine tool manufacturing enterprises, the automotive and tractor industry, in the manufacture of fodder harvesting and grain harvesting equipment, etc. This is leading to a situation in which ONZT is being determined more and more by individual normative expenditures of separate enterprises, and not by average<sup>4</sup> or weighted mean expenses. In turn, determination of ONZT for new technology presumes establishing labor and material resource expenditure norms for its producers, which are oriented toward minimal.<sup>5</sup> The acceptance of minimal labor expenditures per unit of use value for socially necessary products must encourage enterprises which have a higher level of expenditures to reduce

them. Minimizing resource expenditures per unit of use value of the products of labor can be achieved with an improved or an unchanged level of the latter, but given a reduction in expenditures. In either case, both the social utility of the machinery created, and the efficiency of its production and use are increased.

In the formation of ONZT for the production of new machinery on the basis of minimal expenditures of the given enterprise, it is necessary to take into account tendencies associated with the laws of introducing technology into production, and expressed in the need to reduce expenditures for production (work), manufactured using this machinery. Therefore, the size of minimal individual labor expenditures (individual value) for the production of machinery can be accepted as socially necessary, if it ensures the intensive conduct of the economy and meets the goals for the development of the new technology. "The goal of introducing machinery," wrote Marx, "is, in its most general form, to reduce the value and, consequently, also the cost of a product, make it cheaper; i.e., to reduce the working time necessary to produce a product unit..."<sup>6</sup> Thus, ONZT may be that minimum level of expenditures of labor and material resources for the development of machinery under which the new technology ensures A REDUCTION IN EXPENDITURES PER UNIT OF PRODUCTION (WORK) IN THE SPHERE OF ITS USE by comparison with the old technological variant which is being replaced. This, however, does not mean that the social value of the machinery is determined by the conditions under which it is used, and not those of its production. To the contrary, the social value itself influences the size of the expenditures in the sphere of the use of the technology.

The approach depicted to understanding the mechanism for the formation of socially necessary labor expenditures for the production of new technology makes it possible, in our view, to solve the problem of bringing wholesale prices closer to the level of their social value, and at the same time to regard as of paramount importance the interests of the consumers of the new technology: at the established price for a product manufactured by the user of new technology he can achieve a reduction in his actual expenditures, by comparison with normative or planned expenditures.

#### FOOTNOTES

1. K. Marx and F. Engels, "Sochineniya" [Works], 2d edition, Vol 24, p 193.
2. See M. S. Gorbachev, "A Fundamental Question of the Party's Economic Policy. Report of 11 Jun 85 at the CPSU Central Committee Conference on Questions of Accelerating Scientific and Technological Progress," Moscow, 1985, pp 14-15.
3. It is necessary to distinguish real and conditional substitution of labor, which is associated with the fact that "the machine substitutes for a certain number of workers either in reality; i.e., taking their place (this always occurs when the given type of labor is not new and was previously accomplished without machines), or potentially, associated with the fact that we would

require a certain number of workers in order to replace THIS MACHINE." (K. Marx, F. Engels, "Works," Vol 47, p 386).

4. Economists state justifiably that orientation of wholesale prices on average labor expenditures does not facilitate intensification of economic operations. V. A. Medvedev notes that "it would be incorrect to orient Socialist production on average expenditures. The latter are formed under the influence of actual expenditures, including irrational expenditures, which occur in lagging sectors. For the best enterprises they create hothouse conditions which weaken incentives for improvement" (V. A. Medvedev, "Upravleniye sotsialisticheskim proizvodstvom: problemy teorii i praktiki" [Management of Socialist Production: Problems of Theory and Practice], Moscow, 1983, p 253).

5. "It is very important," wrote Marx, "not to overlook the circumstance that the value of a thing is determined not by the time during which it was produced, but by the MINIMUM time, during which it can be produced..." (Marx and Engels, "Works," 2d Edition, Vol 4, p 99).

6. Ibid, Vol 47, p 351.

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## INVESTMENT, PRICES, BUDGET AND FINANCE

### PRICE, FINANCE CONFERENCE HELD IN DAGESTAN ASSR

Moscow **PLANOVOYE KHOZYAYSTVO** in Russian No 2, Feb 86 pp 124-126

[Article by A. Simonyan: "Interaction between Plan Price-Formation and the Finance-Credit System"; names in capital letters printed in boldface in original]

[Text] Recently held in Makhachkala was an expanded coordinating conference on the problem "Interaction between Price-Formation and the Finance-Credit System," organized by the Inter-departmental Scientific Council on Price-Formation Problems of the USSR State Committee on Prices (**Goskomsen**) and the USSR Academy of Sciences, the Economics Institute of the USSR Academy of Sciences, the Scientific-Research Institute on Prices of the USSR **Goskomsen**, and the Price-Formation Section of the **NEO** Central Board. Taking part in its work were scientists and specialists from USSR **Goskomsen**, the USSR Ministry of Finance, USSR **Gosbank**, as well as from their republican and local organs.

The conference was opened by the first secretary of the Dagestan CPSU Obkom, M. YUSUPOV. In his speech he noted the urgency of the problem of coordinated interaction between plan price-formation, finances, and credit. Active utilization of the economic levers must be directed at stimulating acceleration of the country's socio-economic development, as well as at increasing the growth rate of public production. M. Yusupov appealed to the conference participants to work out during the course of the discussion such recommendations for the national economic plan administrative organs as would facilitate a step-by-step implementation of the CPSU's economic policy. We must eliminate all obstacles on the path to introducing scientific and technical progress, ensure coordination in setting prices on new products as well as in the conditions of financing and extending credit for the modernization of existing enterprises and those enterprises which are assimilating new products and technologies. This is not just a matter of changing a few individual paragraphs in the methods indicated in the instructions but rather of finding methods and solutions which are new in principle, those which radically alter the situation with regard to introducing the achievements of scientific and technical progress.

The report by the first deputy chairman of USSR **Goskomsen**, A. STOLBOV, noted that the plan price functions as the basis on which finance-credit relations are developed. Budgetary relations and credit influence price formation, and, in a certain sense, they may be regarded as price-forming factors. Such interaction and the presence of similar functions require us to precisely define



the field of their activity in the economic mechanism. Today we can single out a number of problems connected with the most rapid possible introduction of the achievements of scientific and technical progress into production, the modernization of existing enterprises and the renovation of the active portion of capital production assets, as well as the economical and optimal utilization of material and labor resources; in solving these problems we must utilize economic instruments more actively. Nevertheless, we have observed an erroneous approach to defining the role to be played by each lever in solving specific problems. For example, there is sometimes an exaggeration of the possibilities of prices and price formation when an attempt is made to assign to prices the function not only of encouraging the producers of new equipment by means of establishing various types of mark-ups on wholesale prices but also compensating all outlays with respect to mastering production. Naturally, such outlays should be compensated for by means of prices but within certain, well-defined time periods. And the requirements of enterprises for funds during the period of mastering production can and should be satisfied, to a considerable degree, by income from a special fund, partially by direct financing from centralized sources and by funds borrowed from their credit system.

The reports and speeches by Doctor of Economic Sciences A. GOGOBERIDZE (department chief, Scientific Research Institute on Prices), the chairman of the Dagestan ASSR Council of Ministers, M. MAGOMEDOV, Professor K. TULTAYEV (department chief, Alma Ata INKh /National Economy Institute, and Candidate of Economic Sciences A. MARTYNOV (Economics Institute of the USSR Academy of Sciences) directed attention to the stimulating influence of prices, a factor which can be fully manifested only under the conditions of their interaction with finances and credit. The high level of material consumption by public production and the national income can be explained, to a considerable extent, by the lack of the necessary economic motivation on the part of the user-enterprises in economizing on material resources. The reason for this lies not in low prices on raw materials, other materials, fuel and energy but rather in the fact that measures in the field of price formation have not been reinforced by appropriate measures on the part of the finance-credit system. Any changes in prices are accompanied by a change in the finance plans and credit resources. It happens quite often, therefore, that producers and users manifest an indifference to changes in prices, inasmuch as they are confident that they will be compensated, whereas if prices are lowered, the additional effect will be removed. In this connection, the speakers proposed that no changes be made in the finance plans or the scope of the credit resources while promulgating partial price revisions.

Speaking in support of another point of view were Doctor of Economic Sciences Professor D. ALLAKHVERDIYAN (Economics Institute of the USSR Academy of Sciences) and Candidate of Economic Sciences G. SHAKHOVA (department chief, NIFI /Scientific-Research Finance Institute/. They see the solution to the problem under consideration in freeing up prices from various financial stratifications (stimulation and redistribution), which, in their opinion, would introduce a consistency in financial relations when production is stimulated. But prices should perform one and only one function--that of planning and accounting. Separating them from cost value, which inevitably occurs during stimulation with regard to various items, sectors, and regions, would lead to a situation whereby the administrative system would be deprived of a single-valued

criterion for evaluating and comparing production outlays and results, as well as for comparing different variants of deploying production forces in the country. Using prices to stimulate the production of certain types of products decreases the inefficiency of certain production lines and enterprises which utilize obsolete fixed capital. It is proposed, therefore, that we convert completely to stimulation with the aid of measures involving financial influence (by means of accumulating financial resources in the budget and making allocations from it for the purpose of promulgating measures and by proceeding from the system of priorities as established in the state plans).

These proposals provoked objections from many of the conference participants. In their reports and speeches the deputy chairman of the Dagestan ASSR Council of Ministers, V. KUNEYKO, Doctor of Economic Sciences Yu. AVDIYANTS (the deputy director of the Scientific-Research Institute on Prices), the chairman of the Dagestan ASSR Goskomsen, N. YEMELIANOV, Candidate of Economic Sciences S. KIRILLOV (Economics Institute of the USSR Academy of Sciences) emphasized that under present-day conditions we must strengthen the stimulating function of prices. In the material-production sectors a significant differentiation in outlays has taken shape. In a number of cases it lacks an objective basis. Moreover, is not reflected in production profitability, since in the practice of price formation more and more extensive use is being made of various types of estimated, regional, and basin prices; use is also made of mark-ups on the prices. This conceals the unfavorable situation in certain sectors and the technical backwardness of enterprises, nor does it stimulate the renovation of the inventory of machinery and equipment. We should probably check up on the economic grounds of all cases where there is a differentiation of wholesale prices from the viewpoint of coordinating the present-day requirements and the tasks confronting the national economy.

The conference participants arrived at the unanimous opinion that intensification of the stimulating function of prices, finances, and credit would be assured if there were to be changes in the finance and credit relations with enterprises, changes allowing an excess of outlays over the publicly necessary level. For example, we should not grant financial privileges (lowering the level of payments for production assets or completely eliminating them, turnover taxes, eliminating other finance payments, etc.) to those enterprises having an increased level of outlays on production output. It is only on this condition, in the opinion of Candidate of Economic Sciences N. BRUSILOVSKAYA (Economics Institute of the USSR Academy of Sciences), doctor of economic sciences, Professor V. TORBIN (department chief, Scientific-Research Institute on Prices), Candidate of Economic Sciences N. OMELIANENKO Arkhangelsk branch of the LVIMU [Leningrad Higher Marine Engineering College imeni Admiral Makarov], Dagestan ASSR Minister of Finance D. ZAKERTAYEV, Candidate of Economic Science V. ATOBAYEV (department chief, Ashkhabad INKh), and others, that the groups themselves of enterprises, associations, ministries, and the local organs concerned would actively find ways of optimization, of improving production and technology, would strive to reduce outlays at the enterprises under the jurisdiction of their departments.

In the report by the deputy chairman of the Inter-departmental Scientific Council on the Problems of Price-formation of USSR Goskomsen, doctor of economic sciences, Professor A. DERYABIN, it was noted that certain shortcomings in

the formation of a net income in prices sometimes serve as grounds for posing the question of transferring the stimulating and redistributive functions of price to the financial and credit systems. Furthermore, these shortcomings are conditioned by conservatism in the methods of centralizing net income. For example, the turnover tax is included in the prices at the stage of price formation and has nothing in common with the production of goods creating that added-value product which is sold in the form of a turnover tax.

In the speaker's opinion, we must solve the problem of the turnover tax, and in accordance with the economic nature of its constituent elements (sectorial and inter-sectorial differentiated income, supplementary profits, etc.) we should distribute it among the stages of price formation. If the turnover tax to be realized in the wholesale industrial prices on yarn, fabric, and knitted goods were to function as an inter-sectorial, differential income in the prices on natural and chemical fibers, then the "Replacement" Program (replacing fabrics made of natural fibers used for production-technical purposes by fabrics and non-woven materials made of chemical fibers and other raw materials), would be carried out more successfully, inasmuch as it would become clear that the natural fibers (flax, cotton, wool, and silk) may be put to more effective use in producing consumer goods.

Sharp disputes arose in connection with the discussion on the question of creating, with the aid of a system of prices, finances, and credit, the best conditions for economic growth and for stepping up the growth rate of public production. Such conditions, in the opinion of doctor of economic sciences, Professor V. VOIKONSKIY (laboratory chief, TSEMI [Central Economics and Mathematics Institute] of the USSR Academy of Sciences) are created when taking into account the dynamics of incremental, marginal, and closing outlays within the processes of price formation. Most of the conference participants did not agree with the arguments adduced by this speaker and pointed out their lack of methodological grounds. Thus, the attempt at a simple extrapolation of the correlations between the average and the incremental outlays in the future seems to be invalid. Keying on incremental outlays inevitably leads to a rise in prices. And an admission of the inevitability of a rise in incremental outlays bears witness to the fact that scientific and technical progress does not guarantee a lowering of outlays as a whole. Research studies conducted at the Economics Institute of the USSR Academy of Sciences, the Scientific Institute on Prices, and at other scientific organizations, it was noted by Candidate of Economic Sciences M. POPOV (IGU [Leningrad State University]), Candidate of Economic Sciences N. CHEKHLOV (member of the collegium of USSR Goskomtsen), and L. ROZE (from the Scientific-Research Institute on Prices), demonstrate that there are genuine possibilities for guaranteeing a decreasing trend in the incremental outlays by means of fuller utilization of the achievements of scientific and technical progress and by introducing technologies which have no waste products. Doctor of Economic Sciences, Professor V. CHEPLANOV (director of the Scientific-Research Institute on Prices) emphasized that in the research being conducted we must, first of all, solve the most general problems and those which are most urgent for theory and practice. But analysis of abstract situations could lead to erroneous conclusions and complicate the solution of the problem. For example, one could hardly give serious consideration to the proposals concerning price formation on the basis of an agreement between the suppliers and the purchasers of a product, which would, in the



final analysis, be keyed on the objective level of the incremental outlays and, at the same time, take into consideration the social usefulness of this product.

The conference also witnessed discussions of other important questions of providing integration in the action of prices, finances, and credit, and recommendations were adopted.

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## INVESTMENT, PRICES, BUDGET AND FINANCE

### FASTER RATE OF FIXED CAPITAL REPLACEMENT SOUGHT

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[Article by S. Belova, candidate of economic sciences, under the rubric "Economic Laws and Socialist Management": "Accelerating the Renovation of Productive Fixed Capital"; passages enclosed in slantlines printed in italics]

[Text] The implementation of the CPSU's policy of accelerating the country's socioeconomic development requires the new technical reconstruction of the national economy. The 12th Five-Year Plan is a most important stage in the resolution of this strategic problem. In the new quinquennium, which must become a turning point in all directions of economic and social development of the USSR, the pace and effectiveness of economic growth will be raised on the basis of the acceleration of scientific-technical, technical retooling and reconstruction of production and the more intensive use of the production potential. The CPSU and the Soviet government view the accelerated renovation of productive fixed capital as one of the main conditions to converting the national economy to the path of predominantly intensive development.

Our country presently has a most powerful economic, scientific-technical and cultural potential at its disposal. Means of production in operation in social production were valued at almost two trillion rubles (1.928), including means of labor--1.485 trillion; and object of labor--0.443 trillion rubles. Production potential today accounts for approximately 57 percent of total national wealth. It is qualitatively characterized by a skilled work force and a national economy with a modern industrial structure--a progressive multibranch industry; large-scale mechanized agriculture; and a developed infrastructure--that make it possible to produce the social product and national income in the requisite quantity, to secure stable growth rates, and to increase the "weight" of each percent of this growth.

If Soviet society is to attain the high economic indicators indicated by the CPSU, it must raise the national economy to a basically new scientific-technical and organizational level and convert it to the path of intensive development. In order to attain these goals by the year 2000, it will have to create a production potential equal in scale to all potential accumulated in all preceding years while at the same time modifying its composition and structure. /Improving the production potential/ means that social production must continuously and on a large-scale incorporate progressive machinery and

technology that consistently realize the labor-, capital- and material-saving directions of scientific-technical progress that make it possible to secure the rapid renovation of the social product and the maximum economic and social effect. The indicated /structural changes/ in the production potential must ensure structural optimization and balance in the unified national economic complex, proportionality in the reproduction of fixed capital, working capital and manpower, the ability of the national economy to adapt flexibly and quickly in accordance with progressive changes in science, machinery, technology and in social and individual needs. Branches that have paramount importance for scientific-technical progress and for the solution of socioeconomic problems must be developed on a priority basis.

/The accelerated renovation of productive fixed capital/ is the most important, /priority/ direction of the economic strategy adopted for the 12th Five-Year Plan and beyond. Investment policy calls for shifting the center of gravity from new construction to the technical retooling and reconstruction of existing enterprises. The share of capital investment in technical retooling and reconstruction in productive construction under the 12th Five-Year Plan must be raised to 50 percent compared with 30 percent at the present time. Material, financial and labor resources will be concentrated in this direction. New construction will henceforth commence only when the production capacities of existing enterprises are being fully utilized, when it is essential to develop new regions and to introduce new technologies. The availability of manpower for proposed regions of new construction must also be taken into account. This orientation of the investment policy will help to eliminate the imbalance that existed during the last five-year plans between the scale of growth of productive fixed capital and the possibility of using this capital effectively with the available manpower. It is known, for example, that approximately one-third of the growth of fixed capital was not coordinated with the increase in the country's labor potential. The need for to use capital investments much more effectively by eliminating the practice of scattering investments over numerous construction projects, by reducing construction time, by lowering construction in progress to the normative level, etc., continues to be an important task under the 12th Five-Year Plan as well.

The substantial restructuring of investment policy slated for the years ahead means changing proportions between their accumulation and replacement in the reproduction of the means of labor. The need for the creation and rapid growth of the nation's production apparatus in the past demanded the type of reproduction of fixed capital in which its renovation stressed accumulation and minimized replacement (the principal reason for replacement was physical wear-out). The conversion of the economy to the path of intensive development required another approach to the reproduction of the means of labor: the slower buildup of reserves and the retirement of obsolete capital from production on a larger scale (due to its accelerated depreciation as a result of its more intensive use, and due to the quicker pace of obsolescence as a result of the acceleration of technical progress). Accordingly, the growth rates of capital investments were lowered in branches of material production in the national economy during the 10th and 11th five-year plans at the same time that the proportions of accumulation-replacement changed.



Thus, the average annual growth rate of gross investments in productive capital declined from 8.1 percent in 1971-75 to 3.7 percent in 1976-80 and 3.35 percent in 1981-84. The share of accumulation resources (net capital investments) in gross capital investments declined from 68.5 percent to 56.8 and 50 percent, respectively. The share of resources for renovating means of labor (net capital investments and the renovation amortization fund) in the gross social product nevertheless rose: from 9.2 percent under the 9th Five-Year Plan to 9.5 under the 10th and 9.7 under the 11th; this increase was primarily occasioned by the increase in the share of the renovation fund--from 2.9 percent to 4.1 and 4.9 percent, respectively, and a stable reduction in the share of net capital investment. Accumulation and replacement resources were virtually equal under the 11th Five-Year Plan.<sup>2</sup>

However, the growth of renovation resources on the basis of the renovation fund and change in the reproductive structure of gross capital investments were largely nominal: in the 9th, 10th and 11th five-year plans, there was no change in the proportions between the growth of fixed capital and replacements for their retirement. A considerable part of the replacement resources during this period was used not to increase the scale of actual replacement of fixed capital, but to increase its reserve.

This is attested to first of all by the dynamics of the coefficients of retirement of productive fixed capital. Average annual coefficients of retirement in industry were 1.7 percent under the 9th Five-Year Plan; 1.4 under the 10th; and 1.4 under the 11th compared with 2.0 percent in 1961-70. In agriculture, retirement coefficients of productive fixed agricultural capital (not counting livestock) were 4.1 percent compared with 5.8 percent in 1966-70. Approximate calculations of average annual retirement coefficients of all productive fixed capital in the national economy (2.2 percent in 1966-70; 2.0 percent in 1971-80; and 1.5 percent in 1981-84) confirm their downward trend.

The excess of the increase in fixed capital (the so-called physical volume of fixed capital) over its accumulation on the basis of national income also attests to the systematic use of part of the renovation fund for the expanded reproduction of the means of labor. The relationship of the increase in the "physical volume" of fixed capital (calculated according to the balance of fixed capital without deductions for wear) and increases in its cost (calculated according to the fixed capital balance, taking depreciation into account) were relatively stable in 1961-75 (1.5 and 1.47 according to our evaluation) and rose dramatically to 1.7-1.57 in 1976-80. Calculations also show an increase in the divergence of the renovation fund and the retirement of fixed capital in the 9th, 10th and 11th five-year plans. Thus the share of retirement in the total amortization fund of industry and agriculture (these branches account for up to three-fourths of the volume of the activation, enhancement and retirement of the nation's fixed capital) declined from 62 percent under the 8th Five-Year Plan to 57 percent in the 9th, 45 percent under the 10th, and 35 percent under the 11th Five-Year Plan (1981-84). Thus, in the latter, only a little more than one-third of the renovation fund of the two most important branches in the national economy compensated the retirement of fixed capital.

However, this conclusion requires a certain degree of correction due to the fact that in the course of the last three five-year plans, there has been a rise in the prices of the means of labor, which has increased the cost of their reproduction and has in some measure deformed the proportion between the accumulation and replacement of fixed capital. This directly influenced the growth of the nominal resources of accumulation (through the rise of estimated prices and costings in construction in 1969 and 1984) and indirectly--the growth of replacement resources (through the higher cost of newly activated fixed capital and the corresponding increase in the volume of actual amortization and also through higher amortization norms in 1975, partly as a result of the increase in the fixed capital replacement cost). Under these conditions, the "physical accumulation" of one and the same volume of replacement and accumulation resources diminished. However, since capital investments in accumulation and replacement have different technological structure, and the rate of change in prices on construction output and investment machine building do not coincide, the proportions between accumulation and replacement change in favor of the former.

The existence of such a situation in the national economy in recent years was evidenced by change in the reproductive structure of gross capital investments in favor of the expansion of existing production and new construction with the changeover to estimated prices and costings in 1984. Thus the relationship of the volume of productive capital investments in 1980-83, calculated in 1984 prices, to the same volume in 1973 prices was: 1.11 for technical retooling and reconstruction; 1.14 for the expansion of existing enterprises; and 1.15 for new construction.<sup>3</sup>

The rise of prices on the means of labor is to a considerable degree explained by improvements in their quality--the broadening of the spectrum of their useful properties, their greater reliability and longer service life, their correspondence to the growing social, ergonomic and ecological demands on working and production conditions. This rise is also due to the increasing complexity of climatic and other conditions of production (the growing volume of reconstruction of existing enterprises, the relocation of production to northern and eastern regions, the increasing complexity of extraction of minerals, etc.). However, according to many researchers, such objective factors explain no more than half of the increase in the unit cost of production capacity, which under the 10th and 11th five-year plans swallowed up practically the entire increase in capital investments.<sup>4</sup> Another part of this increase in cost is the direct consequence of imperfections in the management of the reproduction of fixed capital, miscalculations in technical policy and shortcomings in the existing economic mechanism. Thus, all the way up to 1980, it was not possible to halt the increase in the share of construction in progress. To the contrary, with the decline in the growth rate of capital investments and the restriction of the number of construction starts, this share in gross capital investments even increased: from 73 percent in 1970 to 75 in 1975 and 87 percent in 1980. And in 1984, despite its decline to 78 percent, it was appreciably greater than in 1970. Long construction time, large losses in the course of construction work and, as a consequence, high costs determine the need for a cardinal increase in the effectiveness of productive construction/.

Starting with the 12th Five-Year Plan, new facilities must be built and commissioned on schedule; construction time must be reduced to between one-third and one-half of the current level over the next decade. This will require reducing the number of projects under construction at the same time and bringing the construction backlog and volume of construction in progress down to the normative level. The most important tasks of the new quinquennium continue to be: lowering construction cost per unit of commissioned production capacity and substantially improving the quality of construction on the basis of its further industrialization, better organization, improvements in cost estimating, reducing the cost of planned construction projects, and higher labor productivity.

The lowering of the growth rate of capital investments under the last three five-year plans coupled with the assignment of priority to accumulation in the investment process resulted in the aging of the country's production apparatus and in its poorer utilization. Thus, for example, the age structure of industry's productive capital worsened under the 11th Five-Year Plan. According to our calculations, the actual turnover time of fixed capital in this branch was approximately 1.5 years higher than the norm. At the beginning of 1980, industry's fixed capital included capital more than 20 years old (1.5 percent), which was not the case in 1975; in 1982, more than 11% of industry's fixed capital was older than 22 years.<sup>5</sup> According to the data of USSR Stroybank [Bank for Financing Capital Investments], 30-40 percent of the equipment presently in operation has been in operation more than 15-20 years.<sup>6</sup>

However, it is known that the aging of the production apparatus hinders technical and economic progress, the timely updating of the product mix, and the rapid incorporation of advances of science and technology in production. Thus, corresponding to the increase in the quantity of equipment older than 10 years, the share of products in production longer than 10 years also increased: from 16.2 percent in 1967 to 26 in 1976 and 30.6 percent in 1982.<sup>7</sup> It costs more to service old capital and maintain it in working condition. This is, in particular, evidenced by data on the share of expenditures on capital repair in the gross social product. In 1971-84, it was at the level of 2.7-2.8 percent and increased compared with 1961-70, when it was 2.2-2.4 percent, even though according to the amortization norms introduced in 1975, the deductions for capital repairs were reduced. The total expenditure of metal on repair needs throughout the national economy was estimated at 22-23 million tons. Of this figure, 9-10 million tons were regarded as an overexpenditure resulting from the large quantity of obsolete equipment, from the low tempo of its renovation, the insufficient reliability and service life of many types of equipment and spare parts, the unsatisfactory state of the repair base and the organization of repair work, and the violation of rules governing the operation and storage of machinery.<sup>8</sup>

The productivity of aging machinery and especially of machinery that has been repaired many times declines. Its utilization also deteriorates as a result of the greater amount of idle time associated with repair work, in waiting for repairs, in idle time due to breakdowns, etc. There is also a corresponding decline in product quality and an increase in defective output. Thus, in motor transport, the increase in the number of vehicles that have been in



operation 8-10 years, has raised shipping costs approximately 1.5 fold.<sup>9</sup> According to USSR Central Statistical Administration one-time studies of enterprises belonging to 11 machine building ministries, malfunctions and the unplanned repair of metalworking equipment were the cause of 8.1 percent of the 24-hour stoppages in 1971 and 10.9 percent of the stoppages in 1983; these figures for whole-shift stoppages were 7.7 and 9.8 percent, respectively; for intrashift stoppages--15.2 and 18.5 percent. The corresponding figures for forges and presses were as follows: 24-hour stoppages--10.9 and 14.0 percent; whole-shift stoppages--10.1 and 11.8 percent; and intrashift stoppages--19.5 and 22.7 percent, respectively.<sup>10</sup>

The declining return on the aging production apparatus requires that its volume be increased if only to sustain the previous volume of production.

Thus, for example, if indicators of utilization and labor productivity of excavators at mining enterprises in ferrous metallurgy remained at the 1976 level, in order to perform the year's volume of work in 1981 (417 million cubic meters), it would be necessary to have a bucket with a total capacity 456.5 cubic meters less than its actual size, i. e., a quantity almost equal to the entire increase in branch bucket capacity during the 10th Five-Year.<sup>11</sup>

At the same time, the large-scale expansion of production in the absence of sufficient reserves of manpower and objects of labor for the development of newly commissioned production facilities on schedule (which lowers the output-capital ratio) makes it necessary to increase the plan targets of existing enterprises, to decelerate the condemnation of obsolete capital or to keep them as a reserve.

On the whole, the poorer use of the production apparatus as a result of the insufficient rate of retirement of obsolete capital can be viewed as a key factor in lowering the output-capital ratio under the 10th and 11th five-year plans. Thus, according to the evaluation of the NIIPiN [Scientific Research Institute of Planning and Norms] under RSFSR Gosplan, the main factor in increasing the capital-intensiveness of industrial production was the increase in the cost of a unit of production capacity. Moreover, its influence outweighed the positive results of the growth of labor productivity and the optimal use of production capacities.<sup>12</sup> Since the second half of the seventies, a significant influence on lowering the output-capital ratio has also been exerted by the poorer utilization of production capacities, which to a considerable degree is associated with the fact that the renovation of means of labor in the country has decelerated which the quantity of obsolete equipment has increased.

This influence has not been compensated by the rise of the technical level and economy of operation of implements of labor newly incorporated in social production. The national economy still has not eliminated the conditions that contribute to the production of ineffective machinery, the rising cost of which is not offset by the direct and indirect effect of the saving of live and embodied labor on the part of the customer. The machinery that is produced is usually geared to average operating conditions. The number of machines in production and their modifications are small and as a result, their calculated effectiveness frequently differs greatly from the actual



return. What is more, owing to the imperfect nature of the system for certifying new machinery and for evaluating its effectiveness, a new means of labor is frequently priced on the basis of the calculated effect which cannot be realized in production.

The foregoing demonstrates the urgency of the accelerated renovation of the production apparatus through the more rapid replacement of its obsolete, relatively unproductive, and difficult-to-operate parts. The 12th Five-Year Plan calls for the volume of retirement of obsolete productive capital to at least double compared with the 11th Five-Year Plan. Thus, already in 1986 the volume of retirement of obsolete productive fixed capital is slated to increase 1.7-fold compared with its average annual retirement in 1981-85 in order to accelerate the modernization of production in all branches of the national economy. Approximately 31 percent of all productive fixed capital put into operation will be used to replace retired machinery. Machine building is planning to retire 5-10 percent of its metalworking equipment inventory compared with 3 percent under the 11th Five-Year Plan.<sup>13</sup>

Nevertheless, in the process of solving the problem of increasing the volume and raising the coefficient of retirement of fixed capital, it is necessary to consider the specifics both of the present situation in the national economy and the situation in the more distant future.

The strategy of renovation must be based on reliable /information on the state of the country's production apparatus/--its age and technico-economic level. This information must become the basis for long-term programs for the technical retooling of the entire national economy. Here, planners will be greatly assisted by the /general inventory of productive fixed capital/ which will be carried out under the 12th Five-Year Plan. In our view, its program must be sufficiently broad so that the inventory data (on the actual service life of fixed capital, the technical level of individual means of labor and their complexes on varying scale, i. e., wearout and obsolescence, the possibility of condemning individual means of labor or the necessity of extending their service life until the complex to which they belong is replaced, etc.) would provide information on the rational boundaries of replacement of fixed capital for use in forecasting and planning calculations. In order to obtain a uniform evaluation of existing capital, the inventory must be combined with the revaluation of fixed capital.

The inventory must determine the scale of retirement of capital that does not require substantial compensatory capital investments and is associated with the liquidation of essentially unused machinery that is kept by enterprises chiefly as a unique reserve as a result of the unreliability of its external ties. Enterprises also frequently have such equipment that is not usable because it is broken and cannot be repaired, i. e., that has already been retired from production, but has not yet been written off for one reason or another. There is also equipment that is not used or that is used to a slight degree because of the shortage of manpower.

Reserves of this type are attested to by the dynamics of coefficients of retirement of productive fixed capital in industry in 1961-75. These coefficients rose sharply in the course of preparations for the revaluation of

fixed capital (in 1960 and 1972), when enterprises were converted to the new system of planning and economic incentives (in 1966 1967 and 1968). Under the 11th Five-Year Plan, obsolete machinery was condemned at existing enterprises in the process of certifying jobs as well as in the course of eliminating those for which enterprises no longer had a practical need.

However, these ways of increasing the volume of retirement of productive fixed capital cannot be permanent. The stable and quite large scale of replacement of existing capital required for making the transition to the intensive type of reproduction in the future can be secured only if there is /substantial change in the character of planning and management of the reproduction of the means of labor/. The planned management of the proportions of reproduction of fixed capital should also include the active influence of the economic mechanism on change in these proportions. The establishment of a single state system for the planning, accounting, certification and rationalization of will be an important step in this direction. This system must be the basis for matching jobs and manpower in every branch and region of the national economy. The planning of the reproduction of jobs presupposes very substantial change in investment policy--the abandonment of unsubstantiated increases in the volume of fixed capital through new construction and the coordination of the magnitude and reproductive structure of capital investments with the effectiveness of production capacities already in use.<sup>14</sup>

In order to create prerequisites for the accelerated development of the economy under the 12th Five-Year Plan and to secure the technical retooling of all branches of the national economy on the basis of progressive machinery and technology, in 1986 there will be an appreciable increase in the growth rate of capital investments compared with 1981-85.

The increase in resources for modernizing the means of labor will be accompanied by further changes in the formation of the /financial resources of modernization/. As noted above, the structure of these resources during the last three five-year plans changed substantially in favor of replacement, while the part of the amortization renovation fund that is not used for its intended purpose throughout the national economy as a whole is entirely capable of even doubling the coefficient of retirement. Nevertheless, there is need for the further /refinement of amortization norms/ since financial resources still do not always ensure their timely replacement in some branches of the national economy and for certain types of fixed capital. In our view, amortization norms must be increased slightly since they must take into account the impact of obsolescence which intensifies as the present stage in the scientific and technological revolution unfolds. The decree of the USSR Council of Ministers "On the Development of New Norms for Amortization Deductions for Fixed Capital in the USSR National Economy" calls for the approval of /new normative service life periods for machinery and equipment/ before 1 April 1986. These periods should take into account the need to increase the intensiveness of the utilization of fixed capital and progressive schedules for modernizing machine building products. The decree also calls for the elaboration of /standard costs for the repair of fixed capital/ based on its economically expedient service life with the optimal combination of the capital, medium-term and current repair and replacement of fixed capital. /Amortization deductions will be calculated only for renovation/.

However, /real change in proportions between the physical accumulation and replacement of means of labor/, i. e., the correlation between their growth and their retirement, must be the dominant consideration in policy relating to the accelerated renovation of the production apparatus. This requires /bringing renovation allocations more closely into line with the volume of fixed capital earmarked for retirement/, the use of these allocations primarily to replace retired capital, and the planned allocation of the appropriate investment resources for these purposes. The task of raising the role of the fixed capital replacement process in the renovation of the production apparatus on the basis of existing, predominantly cost-oriented premises must be realized under the new five-year plan. In the future, high rates of renovation of the production apparatus as a result of the replacement of retired means of labor must characterize intensive reproduction. The large-scale removal of obsolete capital from production and the replacement of retired capital can produce a considerable economic effect even at the existing technological level.

It is estimated, for example, that in construction, where more than 20 percent of the basic construction machinery is operated beyond its service life, the writeoff of obsolete and worn-out machinery, its replacement with new, series-produced machinery, and the mechanization of manual labor can release at least 150,000 workers who are presently operating and repairing machinery. This is the same as raising labor productivity in construction by 2.7 percent.<sup>15</sup>

The replacement of retired, worn-out means of labor with fundamentally new, highly productive and economical machinery will facilitate a still higher return from existing production.

In order to remove obsolete means of labor from production at an accelerated pace, the growth rate of fixed capital must be temporarily lowered. Thus, a twofold increase in the production potential in the next 15 years means that the average annual growth rate of productive fixed capital must be at the 4.7-4.8 percent level compared with 6.9 percent under the 11th Five-Year Plan. If the rate of commissioning of fixed capital for the national economy is maintained at quite a high level (on the order of eight percent), the goal of doubling the fixed capital retirement coefficient can be successfully met. The approach to meeting this goal can be differentiated for individual groups and types of fixed capital as well as for branches of the national economy. The retirement coefficient must be raised where fixed capital is worn to the greatest degree and where actual service life far exceeds the norm: the manufacturing branches of industry, ferrous metallurgy, electric power engineering, light and food industry. In agriculture, on the other hand, the retirement coefficient should be reduced for the active part of fixed capital. Due to the poor quality and low reliability of the machinery that is delivered to this branch as well as the low quality of repair work, it does not operate for its full service life. For these reasons, the reproduction of the active part of agriculture's fixed capital is dominated by the replacement of retired means of labor, which hinders the industrialization of agricultural production and the growth of the equipment inventory required to perform agricultural work and to increase the effectiveness of production on that basis. Such measures as the



discontinuance of amortization allowances for machinery in operation beyond its service life (as of 1 January 1982) are also designed to curb the "wasteful replacement" of implements of labor and to stimulate the prolongation of their actual service life in that branch. With the normalization of the reproduction of the means of labor in agriculture, economized capital investments can be redistributed in favor of branches of the manufacturing industry and branches of the infrastructure, the share of which (with the exception of transport and communications) in the overall sum of capital investments in the last three five-year plans did not increase, but rather declined, which did not promote the intensification of social production on the whole.

/The transition to the new system of reproduction of the means of labor must be secured by the appropriate development of the investment branches of the national economy/. The increase in the scale of retirement and replacement of fixed capital will require a higher degree of relatively more rapid growth of machine building compared with construction; the reduction of the scale of repair work will necessitate higher growth rates in machine tool construction; the increases scale of resmelting of amortized scrap will require that provision be made for the development of the corresponding ferrous metallurgy capacities, etc. The development of machine building and machine tool construction on a priority basis must ensure the growing volume and higher technical and economic level of means of labor for the renovation of fixed capital. Thus, the growth rates of machine building products under the 12th Five-Year Plan are to be raised to 6.9-7.7 percent compared with 6.0 percent under the 11th Five-Year Plan. Machine tool construction will increase the production of implements of labor at a rate 1.3-1.6 times higher than machine building as a whole. The coefficient of renovation of the active part of fixed capital in machine building proper must be raised to 10-12 percent a year compared with 8-8.5 percent under the 11th Five-Year Plan, which presupposes the corresponding redistribution of capital investments in favor of that branch.

The nation's machine building under the 12th Five-Year Plan must give the national economy new, highly effective means of labor that are needed to modernize production and that make it possible to expand the application of progressive basic technologies 1.5-2-fold, to introduce fundamentally new technologies, to increase labor productivity many fold, to raise the effectiveness of resource utilization, and to reduce the materials-output ratio. The level of automation of production processes in the national economy must be approximately doubled, primarily with the aid of totally automated production facilities that can be quickly and economically retooled. The development and production of new generations of highly effective machinery must be accelerated. The share of new machine building products in 1986-1990 must be raised to at least 13 percent; the productivity and reliability of all newly developed machinery must be at least 1.5-2 times higher than that produced at present.

Change in proportions of reproduction of fixed capital in favor of replacement, while by no means identical with the restructuring of the reproductive structure of capital investments, is nevertheless closely associated with change in the share of capital investments in the renovation



of existing production. Because of the low rate of retirement of obsolete capital from production under the 10th and 11th five-year plans, the share of spending on technical retooling and reconstruction in industry is still insufficient. Thus, in the nine leading industrial ministries, this share rose from 14.4 percent in gross capital investments in 1976 to 21.2 percent in 1980; in industry as a whole, it was 23.8 percent in 1980 and 24.7 percent in 1982. The principal increase was primarily in the share of spending on the technical retooling of existing production. But technical retooling essentially entails organizational-technical measures designed to improve current production, to eliminate bottlenecks. Technical retooling ensures rapid increases in output, the lower cost of production, and higher profitability, but is /insufficient for the dramatic technical transformation of production as a condition for restructuring for the production of fundamentally new, technologically progressive products or for radically changing production technology, in particular, for introducing resource-saving and waste-free technologies/.

These tasks are addressed in the course of the reconstruction and expansion of enterprises and in the construction of new enterprises. However, in order to increase the share of reconstruction substantially, it is necessary to eliminate a number of objective factors that impede the diffusion of this form of reproduction of fixed capital and that prevent its more effective utilization. As shown by research conducted by the Scientific Research Economics Institute under USSR Gosplan, the projected and actual effectiveness of reconstruction at the end of the 10th and beginning of the 11th five year plans at enterprises in a number of branches of industry proved to be lower than the effectiveness of technical retooling, expansion and new construction.<sup>10</sup> This was the result of such factors as inadaptability of the investment complex, especially construction, to work under the conditions of existing production, the deterioration of the conditions of fulfillment of the production program by an existing enterprise when the reconstruction process is protracted, and the lack of material and financial resources for reconstruction. Under the 12th Five-Year Plan, it is obviously essential to strive, above all, to /raise the effectiveness of reconstruction/ based on the corresponding restructuring of the planned management of the reproductive of fixed capital and the improvement of the economic mechanism in accordance with the new needs of economic development while further raising the role of reconstruction and technical retooling in capital investment.

Thus, purposeful state policy of converting the economy to the new system of reproduction of fixed capital must proceed from an integrated examination of the reproduction of the means of labor in the interrelationship and reciprocal conditionality of replacement and accumulation. It must be taken into account that the effectiveness of production depends on securing the necessary physical proportions between these processes. The goal of accelerated renovation of the existing production apparatus can be met only if there is a /uniform policy/ that embraces all stages in the reproduction of /all elements of productive fixed capital/ (design, production, operation, repair, retirement, replacement). Pricing, incentives for developing and producing new machinery, planning of the production volume, and the financing and distribution of capital investments must be coordinated to form a unified

system ensuring the implementation of technical policy for renovating production and its material base.

The planned management of the reproduction of the means of labor must be oriented toward maintaining a certain age structure of the production apparatus corresponding to the minimum of one-time and current costs and the maximum return in the form of output. /The age structure and, accordingly, the average service life of the means of labor must approximately correspond to the rates of technical progress and to product renovation time in investment branches of the national economy/. Renovation rates ensuring the optimal age of the production apparatus can be attained as a result of different combinations of the growth rates and coefficients of retirement of productive fixed capital. Both of these indicators can be control indicators since, as the practice of recent five-year plans has shown, the absence of oversight over coefficients of retirement leads to a number of negative phenomena in the development of social production. The orientation of the policy of distributing capital investments in reproductive directions with due regard to the need to maintain a certain age structure of existing means of labor will promote the effective /continuous renovation of their composition/ at the appropriate technico-economic level.

The /relatively stable proportion between the accumulation of productive fixed capital and its replacement/ will characterize the predominantly intensive type of expanded reproduction, to which the transition must be made in the near future; the necessary changes in this proportion can be secured by using the "temporarily free" part of the renovation fund for accumulation or for increasing the scale of replacement of obsolete capital.

#### FOOTNOTES

1. See: EKONOMICHESKAYA GAZETA, No 10, 1982, p 10.
2. Calculated on the basis of data in the statistical yearbooks "Narodnoye khozyaystvo SSSR" [USSR National Economy] for 1965 through 1984.
3. Calculated on the basis of: "Narodnoye khozyaystvo SSSR v 1983 g.," Moscow, 1984, p. 360; "Narodnoye khozyaystvo SSSR v 1984 g.," Moscow, 1985, p. 380.
4. See: V. Krasovskiy, "Intensification of the Economy and the Capital-Output Ratio," VOPROSY EKONOMIKI, 1984, No 5, pp 39-40; V. Faltsman, "Increasing the Return on Fixed Capital in Industry," VOPROSY EKONOMIKI, No 3, 1985, p. 49.
5. Calculated on the basis of: "Narodnoye khozyaystvo SSSR v 1975 G.," Moscow, 1976, pp. 224-225; "Narodnoye khozyaystvo SSSR v 1980 g.," Moscow, 1981, pp 146-147; "Narodnoye khozyaystvo SSSR v 1982 g.," Moscow, 1983, pp. 135-139; "Narodnoye khozyaystvo SSSR v 1983 g.," pp 143-144.

6. See: M. Zotov, "Intensification of the Investment Process," VOPROSY EKONOMIKI, No 2, 1984, p 19.
7. See: Ya. Ryabov, "Management of Scientific-Technical Progress and the Increased Effectiveness of Production," PLANOVOYE KHOZYAYSTVO, No 10, 1982, pp 4-5.
8. See: PLANOVOYE KHOZYAYSTVO, No 9, 1985, p 54.
9. See: M. Gokhberg, "The Regional Aspect of the Intensification of Social Production," PLANOVOYE KHOZYAYSTVO, No 5, 1984, p 72.
10. See: K. B. Leykina, "Likvidatsiya poter--rezerv intensifikatsii proizvodstva" [The Elimination of Losses--a Reserve for the Intensification of Production], Moscow, 1985, pp 85-86.
11. See: Ye. M. Titiyevskiy, I. Ye. Shcherban, et al, "Intensification of the Mining Industry and Problems in Its Repair Service," GORNIY ZHURNAL, No 4, 1985, p 5.
12. See: Z. Timanova and M. Kharlashina, "Analysis and Methods of Determining the Influence of Change in the Cost of a Unit of Capacity on the Output-Capital Ratio," PLANOVOYE KHOZYAYSTVO, No 4, 1974, pp. 62, 66-67.
13. See: PRAVDA, November 27, 1985, p. 2.
14. See: I. Malmygin, "How Many Jobs Are Needed," PRAVDA, November 25, 1985, p 2.
15. See: Ye. A. Dolginin, "Scientific-Technical Progress and the Mechanization of Construction," MEKHAIZATSIYA STROITELSTVA, No 4, 1985, p 6.
16. See: A. A. Malygin, "Planirovaniye vosproizvodstva osnovnykh fondov" [Planning the Reproduction of Fixed Capital], Moscow, 1985, pp 159-161.

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## RESOURCE UTILIZATION AND SUPPLY

### GREATER AUTONOMY FOR REGIONAL SUPPLY ORGANIZATIONS ADVOCATED

Moscow MATERIALNO-TEKHNICHESKOYE SNABZHENIYE in Russian No 11, Nov 85 pp 19-25

[Article by V. Kurotchenko, doctor of economic sciences, Moscow: "Increasing the Responsibility of the Territorial Supply Agencies"]

[Text] 1.

The April 1985 Plenum of the CPSU Central Committee brought forward and completely substantiated the party's strategy for the long-term period. Provision is made for the acceleration of our country's social and economic development on the basis of scientific-technical progress, the rapid movement forward in the strategically important areas, the structural reorganization of production, and the changeover to intensive methods and effective forms of administration. "The chief factor today," Comrade M. S. Gorbachev emphasized, "is to locate and activate all the reserves for increasing the effectiveness of production and the quality of output. Our cadres must understand the vital necessity of reorienting every enterprise, every branch, and the entire national economy toward the intensive path of development."

This requirement pertains entirely and directly to the improvement of the planned organization of the material-technical supplying of the production associations and enterprises with the objects and articles of labor which constitute the material basis of socialist reproduction.

The system of supply and sales agencies carries out the implementation of the material proportions determined by the assignments in the state plans for social and economic development on the basis of establishing the efficient economic ties directly among the enterprises, branches, and regions of the country. To a large extent that system determines how to overcome the negative tendencies that have been appearing in recent time -- the tendencies of showing a wasteful attitude toward the use of resources -- so that the increase in the need for fuel and raw and other materials is satisfied chiefly by means of the economizing of them.

A factor of especially great importance in using the major reserves of material-technical supply for increasing the effectiveness of production is the increase in the role of the interbranch territorial agencies of USSR Gossnab.



2.

The main territorial administrations of USSR Gossnab, which have been organized in the country's economic regions, with the network of administrations, associations, and enterprises with regard to the shipments of output intended for technical-production purposes, organize the material-technical supplying of the production associations (enterprises) and organizations situated in the area of their activity. They bear the responsibility for the utilization of the funds for material resources that have been allocated to the enterprises and organizations; for providing them with output, the distribution of which is made the responsibility of the main administrations; for organizing wholesale trade in equipment, materials, and semifinished goods, and for locating and selling excess and unused commodity-material assets; and for the most economical organization of supply. The territorial agencies of USSR Gossnab monitor the suppliers' prompt fulfillment of the plans for shipments of output to the customers and for export, as well as carrying out state control of the efficient use of material resources by the enterprises and organizations in the region. In addition to the soyuzglavsnabbits, these agencies are the basic link in the nationwide supply system. Their creation was the result of a prolonged search and the mastery by the socialist state of new forms of administering the processes of the planned utilization and handling of means and objects of labor, and the consequence of the raising of the level of the socialization of these processes in our economy and its transformation into a single national-economic complex.

The chief difference between the territorial agencies of USSR Gossnab and all the previous forms of administration of supply consists in that, in this link, one sees the carrying out of the integration of two economic processes: the providing of the enterprises with producer goods and the planned sale of the output produced by them. In addition, they organize the work and carry out control of the shipments of output by the enterprises and organizations, irrespective of the department to which they belong, that is, they are of an interbranch nature.

It is precisely this feature that provides the national economy with an economic benefit that cannot be provided by the departmental system or branch system of organizing supply. First, by concentrating the variety need for material resources of all the consumers in the region, the main territorial administrations guarantee the economically efficient economic ties between the consumer enterprises and the supplier enterprises, with a consideration of the use of the most desirable territorial and branch division of labor and the achievement of the least expenditures for the delivery of the resources. Secondly, a large benefit to the national economy is achieved by organizing the supplying of product shipments to customers according to their orders from enterprise warehouses which are located in the same rayon.

This kind of supply frees the enterprises, construction sites, and organizations that are receiving the raw and other materials in small quantities or in a broad variety from the need of creating their own reserves

which are slowly turned over. Their reduction by means of the creation of mobile combined reserves at enterprises for shipments of output in the USSR Gossnab system yields a tangible effect. Without organizing the warehouse supply it is impossible to guarantee reliably the needs of the customers for material resources, and without main territorial administrations it is impossible to create an efficient network of associations and enterprises for warehouse shipments of materials.

The volume of sale of output intended for technical-production purposes from enterprises for shipments and through the wholesale stores in our system grew by more than 48 percent from 1975 through 1984, and the average mark-up for raw and other materials dropped by 12.3 percent. Simultaneously, by means of a reduction in the costs of circulation, last year alone the enterprises for shipments economized more than 68 million rubles.

In addition, industrial enterprises and organizations receive an economic benefit from the development, within the system of main territorial administrations of USSR Gossnab, of services involving the preparation of the output for production consumption, including ferrous and nonferrous metals, and chemical, paper, and cable output. They also gain from the centralized delivery to the customers of the ordered materials, rolled metal, instruments, apparatus, and other technical means, which has proved to be one of the most effective forms of satisfying the need.

The territorial agencies carry out a large amount of work to involve in economic turnover the commodity and material assets that are in excess of the norms and that are not being used. By this means, during the past year alone the national economy received a large amount of rolled ferrous metals, steel pipes, cable, chemical, and industrial rubber output, and equipment. Much is also being done to introduce progressive norms for the expenditure of material resources being distributed by USSR Gossnab. As a result, during the first four years of the 11th Five-Year Plan, 8375 million rubles were saved.

A factor of tremendous importance is the work performed by the main territorial administrations and their subordinate enterprises and organizations in procuring, processing, and using secondary raw materials, as well as the work performed by the production-type packing-repair and timber-trade enterprises, the activity of which requires separate independent study. We shall limit ourselves to questions of the more complete use of the existing reserves for improving directly the supply and sales activity of the territorial agencies.

### 3.

Material-technical supply still has serious shortcomings. This creates a rather large number of difficulties in developing the branches of the national economy. The level to which the enterprises and organizations are provided with resources does not yet completely correspond to the requirements in the strategic line followed by our party, which has taken a course aimed at the intensification of the economy and the acceleration of scientific-technical progress. One of the reasons is the regular nonfulfillment by many

enterprises of the plans for production and shipments of output with a consideration of the contractual terms and the production orders that have been accepted. At the same time there have been serious omissions in organizing the economic ties in the activity of the agencies of the nationwide system of material-technical supply.

For example, complete use is still not being made of the tremendous advantages of implementing the plans for supply through the territorial agencies in our system. That would create favorable conditions for systematizing the economic ties among the enterprises, for increasing the effectiveness of supply, and for allowing broad maneuverability of material resources within the confines of the economic region.

The decree of CPSU Central Committee and USSR Council of Ministers, entitled "Improving the Administration of Industry" gave the territorial agencies of USSR Gosplan the responsibility of executing the functions of utilizing the funds for material resources to be allocated to enterprises situated in the zone of activity of those agencies, and gave the ministries the responsibility of monitoring the utilization of the funds. The departmental system of organizing supply was preserved only for the ministries of transport, communication, transport construction, power engineering, gas industry, and agriculture, and the executive committees of the local Soviets of People's Deputies. As is well known, many ministries correctly carry out a large volume of work involving the implementation of the supply plans with output that is to be distributed and consumed within the branch (ores, fluxes, cooperative shipments of castings, forgings, units, and parts of machinery and other articles), and the organizing of direct prolonged ties. However, under the effect of narrowly departmental tendencies and as a consequence of tardily thought-out decisions that have been made by the legal and economic services of USSR Gosplan, in recent years the implementation of the supply plans through the branch ministries, bypassing the territorial agencies of USSR Gosplan, has become widespread also for the interbranch types of output to be distributed by USSR Gosplan and USSR Gosplan. During 1970-1983 the volume of sales of this kind of output more than doubled.

Last year the quantity of output intended for technical-production purposes, to be sold by the branch ministries of union and republic subordination, exceeded the volume of its sale to the territorial agencies of USSR Gosplan. Thus, there has been a decrease in the role of the main territorial administrations in carrying out the supply plans. For example, last year, as compared with 1983, the volume of wholesale sale of output with a consideration of the fulfillment of assignments and pledges for shipments of output in Gosplan of Kazakh SSR, and the Volga-Vyatka, Far East, Northwest, Central Volga, Central Chernozem, and other main territorial administrations dropped by 11 percent.

As a result, the basic questions of implementation of the supply plans -- the specifying of the allocated material assets; the permanent assignment of suppliers; the production schedule for manufacture and shipment of output; etc. -- must be resolved by the production associations and enterprises in the



center, with the branch ministries, bypassing the territorial agencies of USSR Gossnab.

The formation of the economic ties and material flows from the manufacturers to the customers through the branch ministries and departments, in addition to the territorial agencies of USSR Gossnab, could not fail to have an effect upon the serious worsening of supply. Many years ago K. Marx revealed the economic regularity of the relative reduction of the reserves of material resources when there is an increase in the scope of production.

The planned organization of economic ties on the basis of the implementation of the interests of the national economy creates the most favorable opportunities that are offered by that regularity for increasing the effectiveness of socialist production.

However, the unjustified dispersal by branch ministries and departments of the material means among the numerous subordinate supply and sales organizations and production enterprises is leading to the underuse of those opportunities. Narrowly departmental tendencies also manifest themselves in the fact that the so-called inefficient through shipments which are supposed to arrive at the main territorial administrations of USSR Gossnab are sent, not infrequently, to industrial enterprises. Resources with a value of many billions of rubles are diverted for a prolonged period of time to the reserves without any economic substantiation. This leads to a situation in which the rates of increase of reserves outstrip the production growth rates. For example, in 1983, as compared with 1975, the gross social product in industry increased by 43.7 percent; in construction, by 58 percent; and the working capital in the reserves of the commodity and material assets increased respectively by 74.2 and 99.9 percent.

During the years of the current five-year plan the reserves in the hands of the customers, in number of consumption days, increased as follows: rolled ferrous metals, increase of 16.5 percent; rolled pipes, 16.1; calcified soda, 20.8; and cement, 11.2 percent. Just think, at certain construction sites and enterprises there are reserves of individual types of output that are sufficient for 60-160 production days! This data characterizes not only the major shortcomings in the organizing of supplies and the completely passive, nonparticipatory role of the financial and bank system in resolving the tasks posed by the party with regard to changing over the economy to methods that intensify production, but also the large reserves which must be used to resolve them.

The territorial agencies in our system have been granted the right to regulate the shipments of output to industrial enterprises depending upon their availability of reserves. But, practically speaking, they frequently cannot take advantage of that right. A large number of the shipments are carried out by ministries in addition to the territorial agencies of supply, which are deprived of the necessary information for regulating the shipments, maneuvering the material resources, and rendering prompt assistance to the enterprises which are constantly dealing with the main territorial administrations.



The material flows of resources are formed by the ministries in a centralized manner. The glavsnabs of the ministries that are the holders of the assets, when they receive so-called group purchase orders without an indication of the purchasers of the output produced by a particular supplier plant, then submit to it an allocation schedule for the delivery of the types and volumes of the output that are indicated in the group purchase order, subdividing that schedule into deliveries to numerous subordinate enterprises and organizations. This procedure, which was introduced in 1981 despite the decree of the CPSU Central Committee and USSR Council of Ministers, entitled "Improving the Administration of Industry," led to the fractionalization and dispersal in the center of orders for customers (instead of concentrating them when preparing the production schedule on the basis of the territorial principle through the agencies of USSR Gossnab), and led to the complication and disorganization of effective economic ties, to the duplication of the material flows being organized by the ministries, to the economically unsubstantiated expansion and extreme aggravation of the problem of small-consignment shipments, to the limitation of the opportunities for maneuvering the material resources, and to other flaws inherent in the departmental system of implementing the supply plans.

The restoration in full volume of the functions of the territorial agencies of USSR Gossnab in implementing the plans for supplying the enterprises situated in the region of their activity, the changeover from the centralized to the decentralized principle of assigning customers to suppliers through the territorial agencies of USSR Gossnab, is undoubtedly one of the main levers for improving the organization of and increasing the effectiveness of supply, for reducing the economically unjustified volumes of reserves, and for accelerating the turnover rate of the working capital.

At such time the territorial agencies, after receiving from the ministries the notifications concerning the allocation by them of funds to their subordinate enterprises and organizations, as a rule, for all types of output intended for technical-production purposes which is to be sold by the USSR Gossnab system, will be able to specify them jointly with the customers and to submit specifications that are composite for the economic region to the appropriate soyuzglavsnabsyts and departments abyts for the output to be distributed by them.

The contradictions between the center and the outlying areas not infrequently conceals the fact that the local or departmental interests incompletely reflect the objective requirements for the development of the economy. The advantages of the interbranch system of USSR Gossnab also consist in the fact that, through its agencies, it can take into consideration simultaneously the interests of the individual branches of industry and the concerns of each industrial enterprise. Under conditions of the further expansion of the independence and responsibility of the production associations, it is necessary to give them more rights for resolving questions of material support jointly with the main territorial administrations directly in the outlying areas.

In order to improve supply and increase the responsibility of the territorial agencies of USSR Gossnab, it is necessary, in our opinion, to abolish the

exceptions which allow the ministries, for many types of output, to submit composite specifications for the funds that have been allocated to them for materials directly to the soyuzglavnabsbyts in addition to the main territorial administrations. From the Statute Governing the Shipments of Output Intended for Technical-Production Purposes it is necessary to exclude the procedure according to which the ministries which are holding onto the funds are given the opportunity to use the funds in a centralized manner, bypassing the local agencies of USSR Gosnab, other than the ministries for which the departmental system of material-technical supply is preserved. The formation of material flows of all the planned resources through the main territorial administrations will promote the successful resolution of the task posed in the decree of the CPSU Central Committee and USSR Council of Ministers, entitled "The Broad Dissemination of the New Management Methods and the Intensification of Their Effect Upon the Acceleration of Scientific-technical Progress" -- the guaranteeing of resources for operations being fulfilled by the in-house method at the expense of the fund for the development of production, the fund for social and cultural measures and housing construction, and bank credit, directly by the territorial agencies on the basis of purchase orders of the production associations (enterprises) in conformity with the design documentation.

#### 4.

Today, as a result of the insufficient level of reliability of warehouse supply from the enterprises of USSR Gosnab, the ministries and industrial enterprises are frequently forced to plan even the nonthrough shipments for their subordinate production enterprises. Let us consider this with the example of metal supply. As has been indicated by a study of the shipments of metal output, the reduction of the level of reliability of shipments occurs at all stages of planning and implementation of the supply plans. At the level of the enterprises for shipments of output, for example, deviation from the assortment need occurs as a consequence of the fact that they are forced to submit the specification on the basis of an expert evaluation frequently earlier than they receive it from the customers. As a result, for high-grade steel grades sometimes the requisitions are submitted to the soyuzglavnabsbyt, for example, in a range of dimensions, and the customers later give them in standard, grade, and quality sizes.

The enterprises for shipments of output experience difficulties in evaluating the assumed balances as a result of the substantial deviation that the manufacturers make from the fulfillment of the shipment plans on the basis of the purchase orders issued to them. Finally, as a rule, no requisitions are accepted from the customers for many standard grade sizes of metal, in which the total need of the region does not achieve the through-shipment norm.

The difference between the variety that has been requested by the enterprises for shipments of the territorial agencies to Soyuzglavmetall, and the variety that has been ordered for them when placing the purchase orders for rolling mills at the metallurgical plants has reached 18 percent of the standard, grade, and quality sizes, which constitutes 10 percent in tonnage. The metallurgical enterprises, in turn, undershipped, for example, as compared

with the requisitions of Mosgornmetalloznabsbyt, 28 percent of the standard, variety, grade sizes, which constitutes 18.5 percent in tonnage. Thus, whereas the overall plan of use of the funds is basically fulfilled, the level of satisfaction of the specification needs does not exceed 50 percent. The low level of satisfaction of the variety need leads to replacements and correspondingly to losses of from 4 to 6 percent of the volume of the warehouse realization. The elimination of these losses is a major reserve for increasing the reliability and effectiveness of supply.

As we can see, the question of satisfying the variety need is no simple one. Its resolution is impossible without the fundamental improvement of the use and technical re-equipping of the warehouses, the acceleration of the turnover rate of the reserves, the expansion of the warehouse capacities present at the main territorial administrations of USSR Gosnab, and the involvement of the warehouse areas of the industrial associations (enterprises). Thus, the actual variety at Vostsibmetalloznabsbyt reaches 2500 standard, grade, and quality sizes, but the shelving areas at the warehouses contain only 780 compartments for storing the reserves, or approximately one-third of the necessary ones.

At such time the enterprises for shipments of metal output frequently are unjustifiably overloaded by Soyuzglavmetall, sometimes with the consent of the main territorial administrations. For example, a schedule-order is made for them for output that has been produced by metallurgical plants without any production order from the customers, or metal that has not been categorized into specific grades. There has been an increase in the shipments by metallurgical plants which are attempting to get rid of small-tonnage production orders by forming and sending to the enterprises for shipments of metal output composite railroad cars intended for specific customers. This leads to simple transshipments of metal output at the enterprises for shipments of USSR Gosnab. In Belmetalloznabsbyt, for example, they reach more than one-fourth of the total volume of warehouse deliveries. The increase in the reliability of warehouse supply is one of the chief areas for economizing resources, for reducing production reserves, and for accelerating the turnover rate of the means, since it provides the opportunity to concentrate at the enterprises for shipments of output the most slowly turned over means in the reserves and thus to reduce their overall level throughout the country.

In order to increase the reliability of warehouse supply it is necessary, on the basis of the broader application of computer technology, to introduce order into the ascertaining and prompt formation of the customers' variety need, and to generalize it in the territorial agencies of supply and the soyuzglavnabsbyts. We feel that it is necessary to reduce the periods of time required to conclude contracts. It is also necessary to increase the role of the soyuzglavnabsbyts in determining, by means of coordination with USSR Gosplan, and guaranteeing the planned, steady, and complete formation of reserves at the enterprises for shipments of output, primarily ferrous and nonferrous metals, industrial rubber and cable articles, general metal products, tools, and work clothing in a variety that corresponds to the



purchase orders of the customers in the region, and in the completion of the creation of a network of interregional classification bases, with the subordination of them directly to the soyuzglavsnabsbyts.

Finally, it is necessary to assure the providing of the enterprises for shipments of output, on a priority basis, with a broad assortment of materials, keeping in mind the large economic benefit to be achieved at such time by the economizing of resources (thanks to the elimination of the ineffective replacements of grade sizes), the acceleration of the turnover rate, and the reduction of reserves in the branches of the national economy. There are no unclear questions of how to organize reliable warehouse support for the customers on principles of the truly guaranteed complete supplying on the basis of the customers' purchase orders. It is necessary only to increase the organizing role and responsibility of the main territorial administrations and soyuzglavsnabsbyts for that job, and for the use of existing experience at Tatmaskhimsnabsbyt, the Gorkiy warehouse complex, and other enterprises for the shipments of output, where the work is constructed on the basis of the constant dispatcher control of the level of balance between the warehouse resources and the shipment plans, the completeness of the warehouse reserves, and the regularity and completeness of the centralized shipment of output to the customers.

Problems which remain as unresolved and unstudied are the problems of providing economic incentives for the reliability of warehouse supply and the question of the effective delimitation of through and warehouse shipments. The economy essence of the problem of the selection by the production associations (enterprises) of the efficient form of supply (through, or warehouse of the main territorial administration) consists in the comparison of the size of the transport-procurement expenditures and the potential losses from the freezing of funds and material resources in reserves.

All other conditions being equal, the transport-procurement expenses in the warehouse form of supply are always more than in the through form, with which there is no need for additional expenditures of funds for loading-unloading and warehouse-house operations at the warehouses of supply agencies. But with through shipments there are much greater losses from the freezing of means of production in the reserves, especially if those shipments are carried out not in the optimal consignments, but with a consideration of the economic interests of transport and the manufacturers in a size no less than the through norm of a one-time shipment for which a railroad car or container is usually employed.

In recent years new factors in the increase of potential losses have been occurring. The reserves of the means of production at enterprises have been increasing immeasurably because of the expansion of the variety of the materials being used. If a standard grade size of the metal is delivered to one customer in the region, there is no need for the warehouse form of supply. If it is used to satisfy the needs of many enterprises, it is more advantageous to have common reserves at the warehouses of the main territorial administration. Practically speaking, it is economically undesirable for the enterprise to create production reserves of a large variety of output that is also being consumed by other enterprises in the region. On the other hand,



there has been a steady increase in the freight handling capacity of the railroad cars and an increase in the sizes of a one-time shipment.

There arises the problem of determining the choice of the efficient form of supply (through or warehouse) from the positions not of an individual enterprise, but of the economic region being served by the main territorial administration, simultaneously with a consideration of the economic interests of the manufacturers and transport. The methodological resolution of this problem is an important task of economic science.

5.

One of the important areas is the improvement of the interrelationships between the territorial agencies of USSR Gosplan and the served production enterprises in increasing the responsibility of those agencies for their effective support.

The interbranch system of USSR Gosplan which organizes material-technical supply in the country is a complicated independent economic branch that unites more than 2000 supply-sales administrations, associations, and enterprises for shipments of output and other agencies that are linked with its functioning. Unlike the supply administrations of the Councils of the National Economy, in the regions of the country when they were completely responsible, in an administrative procedure, for supplying the enterprises, the functions of the territorial agencies of USSR Gosplan are being increasingly limited simply to the fulfillment of the plans established for them for selling output from warehouses and wholesale stores, and the pledges for sale of output with participation in the settlements and delivery in accordance with contracts that have been concluded.

Narrowly departmental and local tendencies in the operation of the territorial agencies also manifest themselves in the completely inadequate volumes of the development of the contract relations between the territorial agencies and industry, in the limitation of the types and variety of output for the shipment of which the administrations, associations, and enterprises for deliveries agree to conclude with the customers contracts for the guaranteed comprehensive supply. Finally, the entire system of work indicators for the administrations, associations, and enterprises for shipments of output is coordinated not so much with the tasks of the complete and effective guaranteeing of the needs of the production enterprises and construction sites, as it is with the use of the opportunities available at the main territorial administrations.

It is completely obvious that an increase in the volumes of implementation of the supply plans through the territorial agencies will contribute to the considerable expansion of contract relations in supply and sales, to the expansion of more effective forms of supply, and to increasing the material responsibility of those agencies for supporting the enterprises. At the same time this will require the acceleration of the turnover rate of the funds in the reserves, the expansion and technical re-equipping of the capacities at the enterprises for shipments of output, and the joint, more effective

use of the warehouse capabilities of the enterprises of industry and construction.

The widescale economic experiment indicates that the further improvement of the economic mechanism of administration of material-technical supply can be most effective only on the basis of the integration of the economic interests and use of the material-technical base of the territorial agencies of USSR Gosnab and the associations of the branches of industry. One of the important measures in this area must be the development and substantiation of a system of indicators for evaluating the activity of the territorial agencies of USSR Gosnab and for providing economic incentives for their workers, depending upon the fulfillment, by the enterprises being served by them, of the production of the final output and the planned assignments for the level and economizing of material expenditures for the output to be produced, which depends chiefly upon the complete supplying and prompt fulfillment of the shipment plans and the pledges pertaining to the contracts and production orders. It is necessary to intensify the interaction between the main territorial administrations in the course of fulfillment of the supply plan, and to concentrate their attention on the tasks of the more effective support of production and the economizing of material expenditures. This will incomparably increase their role, their responsibility to the customers, and their effect upon the suppliers.

The closer interaction between the territorial agencies of USSR Gosnab and the production associations would require the further development of the organizational forms of administration in the main territorial administrations. At the present time their structure does not include any subdivisions that are directly responsible for the complete providing of the enterprises in individual branches of industry with all types of output that they require. This is partially because the progressive form of guaranteed complete supply is developing insufficiently. It would seem that it would be desirable to create, as part of the main territorial administrations, instant-response centralized-control departments for the material-technical support of individual branches of industry. Those departments, as customers in the agencies of USSR Gosnab, would coordinate the work of the industrial enterprises and the other subdivisions of the territorial agencies, and would provide the comprehensive guaranteed supply and instant-response centralized-control resolution of the questions that arise in the course of plan fulfillment.

It seems to us that the problem of the closer interaction between the territorial agencies of USSR Gosnab and the production associations is one of the most urgent tasks of the scientific-research organizations. It is necessary not only to develop, study, and substantiate the areas that have been expounded, and to substantiate the effective cost-accountability interrelationships on the basis of the integration to be carried out, but also to carry out, on the basis of those developments, the necessary experiments. The closer interaction between the main territorial administrations of USSR Gosnab and the production associations of industry presupposes the joint consideration, with the participation of the managers of banks and the agencies of USSR TsSU [Central Statistics Administration], of the rate of

fulfillment of the supply plans, the measures for the economizing of resources, and the efficient use of reserves.

Under conditions of developed socialism, the agencies of material-technical supply have been called upon to guarantee the rigid, strictest control of society over the most effective use of the material resources, and at the same time for the fulfillment of the production plan at every enterprise they are required to guarantee the prompt delivery to them of all the materials in the most effective types and variety, resolving, in essence, jointly with the soyuzglavsnabsbyts and branch ministries, all the questions that arise in the course of plan fulfillment. The territorial agencies of USSR Gosnab must not be converted into commercial enterprises and organizations.

The integration of the territorial agencies with the production associations of industry will make it possible jointly to resolve also the more large-scale problems which cannot currently be resolved by the enterprises for shipments of output in our country. The most important of these problems is the unification of the variety of output consumed by the enterprises in the region. This will make it possible, while preserving and improving the quality of output, to achieve an economizing of expenditures, which will be much less than the expenses for the creation of reserves in the variety of the existing system. In addition, there will be an expansion of the variety of the output consumed by the enterprises in the region, and a reduction in the losses from the replacements that are forced to be made, substituting some standard, grade, quality sizes by others.

The joint carrying out of measures to use the warehouse areas available at the production areas also for the purpose of providing the other customers in the region with the necessary variety of output, with a consideration of the experience of the Kiev and Leningrad main territorial administrations, will make it possible more rapidly to resolve the problem of the warehouse supply of the customers, which problem continues to be a bottleneck in supporting the branches of the national economy.

One cannot work without looking far into the future. It is only by means of the joint efforts of the main territorial administrations of USSR Gosnab and the production associations of industry that we can develop, coordinate, and carry out a general plan for the development of the material-technical base for the supply and sale of output, including the capabilities of constructing, on principles of shared participation, modern, technically and technologically developed enterprises for shipments of individual types of output in order to support the customers in the region.

A task that requires joint coordination and the most rapid carrying out of measures for its resolution is the task of the complete automation of the loading-unloading and warehouse operations at the industrial enterprises in the region and at the enterprises for shipments of output. This is of great social and economic importance.

Without joint efforts with the enterprises of industry and the agencies of USSR Gosnab and USSR Central Statistics Administration it is impossible to create an automated information system for controlling the movement of



material resources, to assure the prompt location and implementation of the unused resources, and to organize the guaranteed support, with the observance of the deadlines for shipment, and the completeness and variety of the production orders.

The carrying out of the tasks listed here, as well as other similar ones, on the basis of the integration of the efforts of the main territorial administrations of USSR Gosnab and the production enterprises indisputably will promote the improvement of the organization of supply and the increase of the effectiveness of social production.

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## REGIONAL DEVELOPMENT

### STRATEGY, PROBLEMS OF SIBERIAN DEVELOPMENT DISCUSSED

Aganbegyan Interviewed on BAM Zone

Moscow STROITELNAYA GAZETA in Russian 6 Nov 85 p 3

[Interview with A. G. Aganbegyan, representative of Council of USSR Academy of Sciences for Problems of the BAM]

[Text] With the opening of through traffic along the Baykal-Amur Main Railroad Line there begins a new stage in the assimilation of the immense territory between the Lena River and the Pacific Ocean coast. The natural resources of the BAM include timber, coal, petroleum and other riches. To place them in the service of the national economy means to recoup state expenditures on the construction of the road and to create a network of interconnected industrial complexes and centers in regions that were previously inaccessible.

The formation of a multibranch complex in the future is also earmarked for the north of Irkutsk Oblast. Questions of the national economic effectiveness of the assimilation of the natural resources here were on the agenda of the recently completed 21st traveling session of the scientific council of the USSR Academy of Sciences for problems of the BAM. In this regard a TASS correspondent asked a representative of the council, Academician A. G. Aganbegyan, to answer a couple of questions.

[Question] First of all, Avel Gezevich, what is the sequence for the assimilation of the large raw material resources in the Western zone of the Main Line?

[Answer] Under the conditions of the changeover of the national economy to the intensive path and the increased effectiveness of production we must first of all single out from the many storehouses of raw materials those which are especially necessary to the state and can be assimilated relatively rapidly. From this standpoint one of the priority areas is the Mamsko-Bodaybinskiy industrial mining region. This is an old, fairly well-known territory which

is remote from the main industrial centers of Siberia. Supplies could be brought here only during the short navigation period on the Lena and Vitim rivers. The situation changed with the opening of train travel on a significant segment of the Western section of the Main Line. The development of the transportation network and the construction industry base will raise in a new way the question of assimilating the region's wealth and makes it possible to sharply increase the output of mining products. An energy base must be created here--and the Telmanskaya GES has been constructed. When it is started up there will also be an increase in the output of electric energy at the existing Mamakanskaya Hydroelectric Power Station. We are considering the possibility of sending gas here from Yakutiya.

In general scientists associate the upper Lena basin with a qualitatively new stage in the development of the productive forces of all of Eastern Siberia.

We are speaking about eventually creating a new base for the petroleum and gas extraction industry here. For the time being it is a matter for geologists. They are conducting investigatory and prospecting work, which should be stepped up in all ways. Next to the hydrocarbon raw material a deposit of world-class potassium salts has been discovered. And if one takes into account that one-third of the timber resources in the BAM zone are concentrated in this basin one can imagine the potential this territorial production complex has.

[Question] Which territorial production complexes will be developed in the next few years?

[Answer] Priority in this is given to southern Yakutiya where it is possible to increase the extraction of high-quality coal at the Neryungrinskiy Mine and in the Denisovskaya and Chulmakanskaya mines. Extending the railroad from Berkakit to the north, initially to Tommot and then to Yakutsk, is a matter of special importance. This will solve the problem of transportation for the autonomous republic and will make it possible to begin the assimilation of the deposits of minerals. There is an excellent energy base here. Suffice it to say that the Neryungrinskaya GRES works on wastes obtained from enriching coking coal. Hence the inexpensive electric energy which can be efficiently transferred to adjacent regions.

The next point will be the Komsomolskiy-na-Amur Territorial Production Complex. This is a fairly well assimilated region with developed branches of industry. With the opening of through traffic along the Northern Trans-Siberian Railroad Line it was given a new impetus for growth. Construction of the last metallurgical plant is in full swing and next comes reconstruction and expansion of the petroleum processing plant. The procurement and processing of timber are expanding.

[Question] What is the return from expenditures invested in the construction of the Main Line?

[Answer] The railroad will pay for itself mainly as a transportation main line. The decisive step has been taken--the route for through traffic has been extended. A no less responsible task remains: to put the railroad into



permanent operation. But this means that it is necessary to construct all of the stations and villages, depots and repair enterprises, tunnels and other facilities. Even under the 12th Five-Year Plan the BAM should take on part of the cargo from the overloaded Trans-Siberian Railroad.

At the same time the effectiveness of the BAM will increase as the natural resources of its zone are assimilated. This has already been started and will continue at growing rates.

[Question] At the conference of the party and economic aktiv of Tyumen and Tomsk oblasts they emphasize the importance of the development of the social infrastructure in Siberia and the Far East. How crucial is this problem in the BAM zone?

Not to a very great degree yet. With the development of production here the population, including permanent population, will increase sharply. Consequently it will be necessary to increase housing construction, improve the supply of foodstuffs and consumer goods, and develop public health, education and the sphere of services. Here a special role should be played by local party and soviet agencies, which should not follow the example of departments that try to obtain products from new enterprises as quickly as possible, sometimes forgetting that it is first necessary to create conditions for the people. Moreover, this position ends up in losses of products themselves and in a deterioration of their quality. The departmental approach is also reflected in the fact that every ministry isolates its "suburb." It is necessary to wage a merciless battle against it and strive for comprehensive building up of cities and villages even in the planning stage.

#### Comprehensive Assimilation of BAM Zone

Moscow EKONOMICHESKAYA GAZETA in Russian No 50, Dec 85 p 5

[Article by V. I. Pavlov, secretary of the Amur CPSU Obkom]

[Text] The draft of the new edition of the CPSU Program, which, along with other pre-congress party documents, is now being discussed actively in all labor collectives, mentions the fact that a constituent part of the party economic strategy has been and still is accelerated development of the productive forces of Siberia and the Far East. With the assimilation of the new regions, an unwavering assurance of comprehensive solutions to production problems and the development of the entire social infrastructure in the interests of improving the conditions for the labor and life of the people is of special economic and political significance.

A large part of the Baykal-Amur Main Line goes through the territorial of our oblast. A total of 1,338 kilometers--almost 40 percent of the entire route. The zone of its assimilation is significant: 245,000 square kilometers or approximately 67 percent of the Amur area. These places are sparsely populated but rich in natural resources. The area has a great deal of coal, iron ore, nonferrous metals and nonore materials that are suitable for the development of ferrous metallurgy and the production of construction materials. The timber supplies exceed 1.8 billion cubic meters.

## The Force of Party Influence

Under the 12th and subsequent five-year plans the riches of the BAM zone will have to be drawn into economic circulation as completely as possible. This general goal largely determines the activity of the oblast party organization. Questions of the construction of the BAM are constantly being discussed in bureaus and plenums of the CPSU Obkom and meetings of the party economic aktiv. For more than 10 years we have had a commission in operation for questions of construction of the Main Line and assimilation of the BAM zone. The solutions to the problems of the Main Line are actively influenced by party gorkoms and raykoms: Tyndinskiy, Selendzhinskiy, Shimanovskiy, Zeyskiy and Blagoveshchenskiy. They have assigned communists and skilled specialists to the most responsible sections of construction and those industries which have provided for deliveries of drilling tools, instruments and construction materials to the BAM.

Even now it is possible to sum up certain results. The first steps have been taken to expand the scale of the assimilation of the BAM zone: a considerable economic and social potential has been created. Labor collectives have been formed and reinforced for the construction of the Main Line. Working in the central section alone are 46 subdivisions of six trusts: Tyndatransstroy, Bamstroy Mekhanizatsiya and others. They include 50,000 people. This section includes 296 kilometers of track that are being used permanently. They have constructed nine stations and 22 sidings. In Tynda and the villages of the Main Line they have put into operation 213,000 square meters of dwelling space and opened up schools, kindergartens and eight trade and public centers.

Under the leadership of party organizations thousands of Soviet people, communists and Komsomol members have gone through a good school of life and work. Managers with authority have developed on the BAM. The party obkom considers the work on the BAM as a school of high ideological tempering.

The possibilities that have been created give us a firm basis for providing for a changeover from the stage of construction to the stage of comprehensive economic assimilation of the BAM zone. In Tynda, for example, the Tyndales Association has been organized. Five timber industry associations procure 2.3 million cubic meters of timber a year, and more than 5 million cubic meters are procured in all of the BAM zone. But it is not only timber that is shipped by Tynda railroad workers. From southern Yakutiya they annually deliver to the consumers up to 6 million tons of coal. Even this year the overall cargo turnover will increase to 13 million tons. In a word, the collective for the management of the Baykal-Amur Railroad, whose birth date was 1981, began to stand firmly on its feet under the 11th Five-Year Plan, its first one.

## Seeing the Future

Even under the 12th Five-Year Plan the role of the Main Line is increasing many times over. Within 4 years it will go into permanent operation. Therefore the efforts of communists and all labor collectives should be directed toward early and high-quality completion of construction and more

active utilization of the BAM resources in the national economy. This was discussed in particular at a meeting of the aktiv of the oblast party organization.

One cannot say that party and management organizations do not devote attention to the development of industrial branches of union specialization--timber procurement and mining. But a good deal here is done noncomprehensively and, frankly, inefficiently. For example, so far the timber industry enterprises of the oblast ship 40 percent of the timber to the consumers in round form. Low-quality kinds of coniferous and deciduous varieties are not used. Scraps from wood processing are discarded. The unused raw material amounts to millions of cubic meters.

The development of wood-processing enterprises could contribute to comprehensive assimilation of timber resources: for producing 540,000 cubic meters of timber materials, 125,000 square meters of plywood and 15 million square meters of fiberboard. These suggestions have been substantiated and submitted by party organizations and local soviets of Tynda, Fevral'sk and Svobodnyy. They are fairly convincing: combines and plants are necessary for retaining workers in the BAM zone and enlisting the members of their families in public production.

The oblast party organization links together the assimilation of the Main Line and further improvement of the transportation system. In this sense it supported the suggestion concerning the construction of a railroad branch line from Shimanovsk on the Trans-Siberian line in the direction of Fevral'sk on the BAM. And the main requirement of the time now is not to wait but to act energetically. They have already begun to construct the first section of 40 kilometers. Its operation will provide access to the Chagoyanskiy Lime Deposit which is necessary for the new lime plant and, in the future, also the cement plant which will have a capacity of more than 2 million tons. With its introduction the enterprise will reimburse 100-fold those expenditures that are being made today to ship construction material from other regions of the country, and cement itself will no longer be in short supply.

This region is also rich in iron ore from the Garinskiy, Ust-Garanskiy and Glubakinskiy deposits. Coal supplies are concentrated in the Gerbikano-Ogodzhinskiy deposit. There is also a supply of raw materials for producing fertilizers. But the existing approach to the assimilation of resources deserves the sharpest criticism. For a long time they have been doing only planning developments for the biochemical plant for producing nutritive yeasts. For about 25 years neither the TsENII under the RSFSR Gosplan nor the DVNTs has been able to reach an agreement with the Yakutiya Division of the Siberian Branch of the USSR Academy of Sciences concerning the distribution and construction of a new metallurgical base for the Far East. Everyone can understand both the difficulty in justifications and other factors, but we are convinced that not even the most difficult issue takes a quarter of a century to "work out."

And here is another problem which one can certainly not call solved. The demand for mineral fertilizers is constantly increasing in our zone. The sovkhozes and kolkhozes of the Amur area apply only up to 30 percent of the



optimal doses of nitrogen and phosphorus fertilizers. And it is fairly expensive to ship them--it costs 10 million rubles, which is about 50 percent of the expenditures on production. At the same time, as they say, the oblast is actually "sitting" on phosphorus raw material--25 promising deposits have been discovered here. The regions in Yakutiya and the Okhotsk Coast that contain apatite are also awaiting their day. Moreover, there are plans for the construction of plants for producing mineral fertilizers in Tynda and Fevral'sk. The mineral fertilizer production, however, has come in quite an unexpected variant--the plant is being constructed 2,000 kilometers away from both the raw material base and the consumer.

There is only one path to increasing the effectiveness of capital investments: bringing the enterprises for processing the raw material as close as possible to the places where it is extracted. This is something that was stated clearly and concisely in the draft of the new edition of the CPSU Program.

#### For a Stable Collective

I am speaking about the problem of the stability of collectives because in our oblast there are examples in which we have lost the labor collectives that have been formed in the BAM zone. Take, for example, the fate of the hydraulic construction engineers of the Zeyskaya GES. Because of the fact that we could not succeed in overcoming narrow departmental interests, because the USSR Ministry of Power and Electrification could not respond efficiently, there were thousands of energy construction engineers left without work in our zone--experienced people who were accustomed to the severe natural conditions. We should have transferred some of the collectives to the Bureyeyskaya GES and provide them with work, but this was not done and the people dispersed. It is necessary to create from the beginning the collective for the construction of the Bureyeyskaya GES which is part of the same Zeyagesstroy Administration.

This is an instructive lesson both for the departments and for the oblast party organization. When we recall this lesson even now we get the feeling that the past could be repeated. The volumes of work of the trusts have decreased and they need somewhere to send the people? Experienced people are leaving the main line--up to 5,000 a year. In order to retain the construction workers we need an efficient program for economic assimilation of the zone of the Baykal-Amur Railroad Main Line. For our part we are ready to make the maximum efforts. It is now up to the planning agencies. It would seem that it would be reasonable to borrow free personnel from facilities of the USSR Ministry of the Coal Industry, the Ministry of the Pulp and Paper Industry and other departments.

The more so since we have an immense amount of work to do. It will be necessary to assimilate 40 percent of the funds allotted according to the technical plan for the construction of the Main Line. More and more complicated work will have to be done--completing the construction of the stations and sidings and straightening the track. The Ministry of Transportation has transferred some of the road construction subdivisions to Yakutsk. It would also be possible to single out subdivisions for the creation of facilities for the locomotive and railroad car works in Tynda, without which the new road cannot develop. But the concerns of the Ministry



of Railway seem to have little to do with those of the Ministry of Transport Construction. The party organizations of the oblast are trying to find a point of interaction, but it is difficult to do this when the departments are not interested.

A special concern of ours is to implement the social program. Today in the BAM regions there are 7.9 square meters of dwelling space per one resident--3.3 less than the average for the oblast. There are not enough consumer service or public health institutions either.

To be sure, under the 12th Five-Year Plan it is intended to introduce 1.5-2 times more cultural and social, cultural and domestic facilities than were introduced during all of the time of the construction of the BAM. But we are bothered about the narrow departmental approach to solving these problems. One of the reasons is that it is more effective for the ministries to invest funds in the western regions of the country. For here it is 1.5 times and sometimes twice as expensive to provide a square meter of housing or a club or a store. This means that somehow we must economically motivate the departments to be more active in constructing social, cultural and domestic facilities in the BAM area.

Finally, another impediment in the assimilation of the BAM zone is the lack of comprehensive scientific research work. The scientific developments that have been conducted have not been generalized and normatives have not been established for all of the kinds of work. This makes preplanning research and the planning of the facilities more difficult.

And there is this problem: we need more homes of the farmstead type, for example, at the stations of Izhak, Marevaya, Lopcha and Dyugabul. They are more convenient for the development of settlements and for gardening. We think that the local soviets can handle this task if the functions of a single builder are concentrated in their hands. We have experience in this in Tynda where the OKS was created. The Gorsoviet concentrates the funds of the departments and is intelligently building up the capital of the BAM zone.

The implementation of the plans that have been earmarked will undoubtedly accelerate the formation of two industrial centers--Tynda and Zeysk, and also the Selendzhinskiy TPK. Their creation, in turn, will increase the volume of industrial output three-fold. Now, when the drafts of the plan for 1986 are being formed at the enterprises, communists and all labor collectives are exerting efforts so as to take existing reserves into account in them as much as possible, to determine the highest goals and to provide a worthy greeting for the 27th Party Congress.

#### Productive Forces of Siberia

Moscow IZVESTIYA in Russian 3 Jan 86 p 2

[Text] The stages in the assimilation of Siberia are generally known. The result is also known: beyond the Urals an immense industrial potential has been created. Immense is not an exaggeration. In Irkutsk Oblast alone the value of fixed production capital is measured in the tens of billions of

rubles. Here they produce a large share of the union's aluminum and more than 13 percent of all the paper pulp, and one-tenth of the nation's timber is procured here. Irkutsk Oblast is among the largest suppliers of electric energy, caustic soda, coal, iron ore, timber materials and so forth.

In our opinion, the construction of the Baykal-Amur Main Line mark the culmination of a large stage in the assimilation of Siberia. In the next stage the path will be opened up to deposits that were previously cut off because of a lack of roads and there is a possibility of introducing into national economic circulation about 1.5 million square kilometers of new territory.

Not so long ago party and soviet agencies of Irkutsk Oblast in conjunction with the Siberian Branch of the USSR Academy of Sciences conducted a conference on the development of the region's productive forces. If one is to speak about the prospects, even a cursory list of the new areas of assimilation would take up several pages. Advancement to the north promises us petroleum and gas and increased extraction of commercial timber, mica, coal and mineral raw material for producing fertilizers. In a word, it is not a question of what to extract; it is a question of how to extract it and at what price?

This is the time to look back. During the 1950's-1970's not only to the extent of our efforts (according to our means), but also to the extent of our abilities (in terms of the level of the technologies and concepts of that time). Figuratively speaking this was a time of creating the theaters of operation. We laid roads to the near north, constructed hydroelectric power stations, created a construction base and formed mobile, highly skilled collectives who were accustomed to the severe climatic conditions. At that time science and practice were at a standoff as to how, according to what schema, were productions to be located here and the population distributed. The idea of territorial production complexes (TPK's), which is based on group distribution of enterprises and group settlement, an idea which is now generally recognized, won out. As a result, when creating, for example, the Bratsk-Ust-Ilim TPK it was possible to save 15 percent of the capital investments.

New enterprises rose up quickly on Siberian land and rapidly began to produce aluminum, iron ore concentrates, pulp and other products. In a word, the task was carried out, but when advancing to the north, to the uninhabited regions, the ministries and departments tried to produce industrial products as quickly as possible, leaving for the future the creation of everything that might be called the rear guard of production or the industrial and social infrastructure. They put off until "later" the roads, municipal services, heating, purification installations and so forth, and they did not always burden themselves with the construction of convenient housing, houses of culture, sports facilities, kindergartens or schools. Remember how glad everyone was about the early start-up of plants and combines, how their products came at exactly the right moment--consumers from all corners of the country received them with real enthusiasm. The need for them was such that it seemed silly to hold back the start-up of the enterprises because of some boiler or purification installation.

To be sure, even at that time the territory timidly protested and was convinced that this could not be done, that it would not work, that it was necessary to solve all the problems comprehensively. But the branch had the rights and the funds and although they acted as though they were paying attention and for the sake of propriety promised that at some time in the future, without delay, all the shortcomings would be eliminated and they were glad to sign documents and other contractual commitments--promises, as it turned out, they had no intention of keeping. The fact that the rear support facilities for production were lagging behind, there was no correspondence between the economic and social development of the oblast and capital investments in the construction of new facilities and the technical reequipment of existing enterprises, and that there was a violation of the principle of efficient concentration of enterprises in one region--all this ended up in significant losses.

This, as they say, is food for thought. The proportion of capital investments in technical reequipment of existing enterprises in Irkutsk Oblast is half the average for the country. Yet today, in order to maintain the technology at the modern level, it is necessary to invest no less than 20 percent of the capital investments in updating existing enterprises--these are the ABC's of economic science. The ministries and departments, of course, know these ABC's. Why not follow them? The entire secret lies in a unique kind of departmental thinking. An operating enterprise will at least produce products--and in the worst case it is possible to patch it up in some way. But where should the capital investments go? In the creation of new capacities! They will immediately produce an increase in output!

But is this departmental logic logical? Here are its consequences. Almost all of the TETs's in Irkutsk Oblast are working at the maximum capacity for the basic equipment. The Angarsknefteorgsintez Production Association, using outdated equipment and old technologies, according to the calculations of specialists, consumes 2-3 times more electric energy and heat and requires 4-5 times more proportional expenditures of labor than a modern enterprise does. We are not speaking about a small plant--thousands of people work at the enterprise and it was the reason for constructing the city of Angarsk during the postwar years. But this situation is certainly not unique. It took so long to construct the Khimprom Association in Usolye that one of its lines--the one for obtaining acetylene from calcium carbide--was obsolete. The branch was reoriented for other raw material--petroleum. Until the questions of reconstruction were coordinated world practice considered petroleum to be too costly a raw material and returned again...to calcium carbide. Thus it appeared that Khimprom was on the proper level. But this level was about the same as if we had put the old Polzunova steam engines on the steel main railroad lines, explaining this by the critical interest in utilizing steam.

Old plants, factories and combines are not a problem; they are a disaster. In Irkutsk Oblast 30 enterprises produce 90 percent of industrial products. And the other 370 (!) produce only 10 percent. Many of them lead a pathetic existence. What will happen to them next? How are they to develop? Typically, when the managers of these enterprises have been asked to present their ideas about this the majority have preferred to remain silent.



It is known that the responsibility for the fact that the enterprises are lagging behind does not lie with the territorial agencies. They say that the oblast has not fulfilled the plan. Consequently, personnel are poorly educated in the oblast and labor and technological discipline are weak. But even if this is an important half of the matter, it is only half. And all the means for technical progress of the enterprises are in the hands of the branch, the ministries and the departments. In this case should their responsibility for the poor work of the enterprises under their jurisdiction not be raised to a qualitatively different level?

As is the case everywhere, we too are considering the prospects for the development of our oblast's productive forces. It would seem that the main task whose resolution will make it possible to utilize the industrial potential we have acquired at such a cost is to bring up the rear, that is, to develop the service and auxiliary branches. Calculations show that in order to reach the average annual--as you see, we are speaking only about the average level--indicators, the proportion of capital investments in the nonproduction sphere should be no less than 30 percent, and in technical reequipment of existing enterprises--no less than 25 percent. What will this produce? Approximately a 1.5-fold increase in industrial output.

But perhaps even these impressive figures are not the main thing. It is important to put a stop to migration and to stabilize the population in Siberian cities and villages. For in the oblast construction complex today the shortage of labor force amounts to 15-20 percent, and in the agricultural and food complex--10-15 percent.

An especially crucial although also well-known problem is the weakness of construction subdivisions in Siberia. Alas, there is no precise figure which could tell how many millions' worth of imported and domestic equipment have been unused for how many years in the Siberian long-term construction sites. The same equipment, incidentally, which would have been suitable for updating old enterprises that were operating at a loss.

Thus perhaps there is no need to build any more in Siberia but simply to complete what has been started? There is a need. Moreover, there are facilities which we simply cannot afford not to construct. A simple example. In the region of the Western BAM there are mature forests which have been standing too long. Not a single one of the timber industry enterprises planned for this area by the Ministry of the Timber, Pulp and Paper and Wood Processing Industry have been constructed. The procurement workers are establishing the raw material base in areas and oblasts where there is a shortage of timber. Today they have already gathered about 100 million cubic meters, one-fifth of all the timber felling. This was shared among 11 ministries and departments; it was shared in spite of the categorical objection from the oblast soviet of people's deputies and the CPSU obkom. Again the branch took the upper hand and the territory will have to pay for it. Perhaps the branch is happy about the overall economic advantage? Judge for yourselves: the value of a cubic meter of timber in the timber industry enterprises of the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry is 10-12 rubles, and for the independent procurement

workers--50-52 rubles. Multiply the difference by hundreds of millions and this will be a "godsend" which, judging from everything, is what our planning and financial agencies need for the development of timber industry enterprises in the BAM zone.

Continuing the discussion of the future, there is now a need to construct in our region enterprises for processing phosphorites and an ore-enriching combine for producing molding sand on the right bank of the Ust-Ilin Sea, to develop work for extracting petroleum and gas on the Nepskiy Anticline, and so forth. We have already gone into these regions and logic and economic expediency suggest that this work be done. But it must be done taking lessons from the past into account and we must begin the construction of the building not with the roof, but with the foundation, with the rear support facilities.

Now the immense expanses of the North, where it is possible and necessary to construct new cities, do not attract the ministries and departments as much as they frighten them. Well, for example, the branch thinks: what is the point in constructing a plant for potassium fertilizers on the Nepskiy Anticline if it is possible to place it somewhere closer to inhabited areas? It is not necessary to spend money on the costly social infrastructure; everything is already there, from the bathhouse to the kiosk for the Soviet press. To be sure, everything will be more crowded in the old city, but the more the merrier....

Not so! And the worst harm is done to the old city, the people in it, and the state itself. Oversaturation with industry in the region of Angarsk and Bratsk has already created such difficulties that it is literally necessary to sound the alarm. The surrounding environment is suffering and millions of rubles must be spent in order to save it. What is the reason for the problems? In general we have already given it, but we shall repeat it once again: the departmental approach and the priority of local interests.

For a number of years the party and soviet agencies of the Siberian oblast did not tire of asking for the right to decide where and what to construct, what and at what price to extract, the right to develop basic productions and rear support facilities proportionally. We are not speaking about undermining the functions of the ministries. Let them construct and create what they want to, but when it comes to the social-domestic and cultural construction they should untie the hands of the territorial agencies and transfer all of the funds for the social infrastructure to the local soviets.

In view of all that has been said above, in the subsection of the draft of the new edition of the party program entitled "Structural Rearrangement of Public Production," in our opinion, the paragraph before the last one needs to be made more precise. After the words "Siberia and the Far East" I suggest inserting: "When assimilating new regions it is especially economically and politically significant to have unwavering insurance of a comprehensive solution to production problems, a thrifty attitude toward the environment and, taking into account the extreme natural-climatic conditions, the creation of a comfortable social infrastructure in the interests of inhabiting the region as rapidly as possible and retaining highly skilled personnel."

The future of our economy is being formed largely in the areas with severe weather. It is necessary to construct Siberia with the proper substantiation, with economic assiduity, that is, without throwing money to the wind, but also recalling that the stingy person always pays twice and the lazy person does nothing but work.

#### Development of Transbaykal Area

Moscow EKONOMICHESKAYA GAZETA in Russian No 2, Jan 86 p 7

[Article by N. Nosov, chairman of the Chita Oblast Planning Commission, deputy chairman of the Oblispolkom]

[Text] The special economic and geographical situation of Chita Oblast--between the Far East and regions of Siberia--exerts an influence on its specialization--diverse mineral and raw material resources are concentrated here. But the favorable possibilities are far from being adequately utilized.

One of the reasons is that the development of the fuel and energy complex is lagging behind the needs, which has begun to impede the development of the oblast's economy. Our energy system is critically short on capacities. The uncovered shortage will increase sharply in the future. If we do not take effective measures now, in the near future it will be possible to cause appreciable harm to the development of the national economy. The USSR Gosplan and the USSR Ministry of Power and Electrification should evaluate the existing situation with a full understanding of how crucial it is. It is necessary and it is important not only for our oblast, but for all of the eastern part of the country to create a unified system of electric power transmission lines along the BAM and the Trans-Siberian Railroad, which should also form a unified energy circle: Irkutsk--Ulan-Ude--Chita--Skovorodino--Neryungri--Udokan--Ust-Ilinsk--Bratsk.

It would be expedient, in our opinion, in the draft of the Basic Directions in Section XII for the RSFSR to insert after the words "to develop the construction of the Tugnuyskiy Coal-Mining Face": "to provide for the construction of the second section of the Kharanorskiy Coal-Mining Face and the Briquet Factory." And subsequently, after the words "to put into operation the capacities at Ulan-Udenskaya TETs-2" to add: "to begin the construction of the second section of the Kharanorskaya GRES and the Shilkinskaya GES."

The drafts of the precongress documents set forth as one of the main directions which provide for further economic and social development the introduction of the achievements of scientific and technical progress into all branches of the national economy. In our oblast this means: first, to update fixed production capital, mainly through new technical equipment and technology which takes into account thoroughly and completely enough the peculiarities of local natural and economic conditions; second, during the assimilation of regions with difficult natural conditions (the BAM zone) to achieve the development and introduction of principally new labor-saving technological processes that provide for protection of the environment.



Since the Chita Transbaykal area is destined to become an even more important region for nonferrous metallurgy in the country than it is now, the oblast organizations along with the USSR Ministry of Nonferrous Metallurgy must work more intensively on reconstruction and expansion of the existing mines and enriching factories and complete more quickly the construction of the Zhireken and Orel Ore-Enriching Combines, and the Novo-Shirokinskiy Mine with the complete range of facilities for social-cultural and domestic purposes. The capacities that are being removed must be replaced by introducing more actively new enterprises and sections for extracting minerals.

The development of the oblast's productive forces is taking place with a constant shortage of labor force. The high migratory mobility of our population is not being curtailed.

I should like to mention one more problem that alarmed people in the Transbaykal area: further development of the timber and wood-processing industry. We are bothered by the abnormal situation in which as procurements increase there is no increase in the output of products as a result of comprehensive processing of timber, utilizing all the byproducts that are formed. We think that it is possible to solve the problem of complete utilization of timber byproducts only with the organization of hydrolysis production and the production of chipboard (DSP) or fiberboard.

But the USSR Ministry of the Timber, Pulp and Paper, and Wood Processing Industry is not providing a positive solution to this problem, thinking it more economical to import DSP to Chita partially from enterprises of the Buryat ASSR and Irkutsk Oblast, and about half of the need for milling materials will be covered through deliveries all the way from...Tyumen Oblast. Why do things so inefficiently?

A most important task for this branch during the forthcoming period, in our opinion, is the achievement of more efficient proportions between timber procurements and the processing of timber, and further increasing the capacity for producing timber materials, prefabricated buildings, furniture and other kinds of products from processing timber. To this end it is necessary to construct furniture factories in the cities of Chita and Shilka as well as certain other facilities for wood processing. We hope that the USSR Gosplan, the RSFSR Gosplan and the USSR Ministry of the Timber, Pulp and Paper and Wood Processing Industry will support our proposals.

A positive solution to the problems that have been mentioned will make it possible for the oblast to take a significant step forward in the development of productive forces and make a more significant contribution to the country's economy.

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## REGIONAL DEVELOPMENT

### LONG-RANGE BAM AREA DEVELOPMENT TARGETS, DIFFICULTIES DETAILED

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[Article by V.P. Chichkanov: "The Baykal-Amur Main Railroad Link: The Frontiers of Social Development"]

[Text] One typical feature of the present stage in the development of the Soviet economy is the shift of production forces toward the eastern regions of our country, where across the expanses stretching from Baykal to the shores of the Pacific Ocean an enormous variety of natural resources have been found. The intensive development of these resources has been recognized as one of the most important directions in the development of the USSR's national economy during the Eighties and for the foreseeable future. In a special section entitled "The Disposition of Production Forces and Development of the Economies of the Union Republics" the draft Main Directions for the Economic and Social Development of the USSR 1986-1990 and the Period through the Year 2000 singles out in particular the need to reinforce cadres in the regions of Siberia and the Far East; for which, provision is made for insuring preferential growth in the living standard of the population in these regions. The country needs from this region the natural resources that are in short supply, and sometimes unique: the forests, in which in terms of reserves and quality the Far East occupies one of the leading places in the country; the fish reserves of the seas and oceans, whose main supplier is the Far East; many kinds of minerals—tin, iron ore, hard coal, oil, metal-ore complexes, precious metals and so forth. The stepped-up pace of economic growth in the region is being insured by constantly increasing its share of state-funded capital investment and the concentration of material resources and manpower there.

One key element in the economic development of these resources is the Baykal-Amur Main Railroad Link (BAM). The ahead-of-schedule start of through work traffic along it is offering access to many of the natural storehouses of the Far East and accelerating the development of entire industrial centers and territorial-production complexes within the regions located along the steel track.

The construction site of the century—BAM—has no equal anywhere in the world in the history of railroad construction in terms of its complexity and the diversity of its engineering installations, the use of the most up-to-date

construction mechanisms and the daring of its engineering and technical concepts: the length of the railroad from West to East is 3,500 kilometers: from the Ust-Kut station to Komsomolsk-na-Amure (together with the Bambovskaya-Tynda-Berkakit line). Almost two-thirds of the BAM track has been laid through permafrost regions. Some 3,348 artificial structures have been raised, including 1,987 bridges, of which 142 are more than 100 meters long. Nine tunnels with a total length of more than 30 kilometers have been dug out along the track; some 364 million cubic meters of earth have been removed during the construction of BAM.

There are 57 stations along the track and already today the railroad has given life to three cities: Severobaykalsk, Tynda and Neryungri. Today the population of the BAM zone is more than 1 million. Along almost the entire length of the track the work has been done under the most complicated of mountainous and geological conditions, in harsh wold places with temperature gradients ranging from plus 40 degrees in the summer to minus 60 degrees in winter, in a zone of permafrost and high seismic activity, which required a whole range of fundamentally new engineering and technical solutions.

The BAM railroad workers have already delivered 50 million tons of various kinds of freight to the consumers and carried more than 5 million passengers. Traffic is increasing rapidly here, at about 25 percent to 30 percent annually. Two-thirds of the main track is in constant operation; along the remaining track, which will be completed in 1988, there is temporary and work movement of trains and construction will continue in the future. The organization of amenities along the track is moving ahead at full speed: station buildings are being constructed, along with locomotive and rolling-stock depots and auxiliary service projects. It is particularly important to settle experienced personnel permanently in the zone and create the best living conditions for the families of the Bambovskaya people. To this end, in the coming years it will be necessary to almost double the volumes of housing and municipal construction. The decision has already been made to build an extension--the Malyy BAM [Little Bam] to the North into Yakutiya--from Berkakit to Tommot and beyond to Yakutsk; and work has been started on this.

What, then, will the Baykal-Amur Main Railroad Link give us, the people of Siberia and the Far East?

It will help in solving a whole set of national economic tasks, the most important of which are the following: the creation of coal and metal bases; the recovery of large volumes of natural gas in Yakutiya; the development of nonferrous metallurgy and the construction materials industry; intensified use of timber raw materials and the organization of chemical processing of these resources; the construction of main railroad lines and the building of sea ports; accelerated population growth and the creation of high living standards; the intensified study of the territory and scientific and technical work to open up extensively the very rich natural resources. Thus, BAM is a very important stage in the consistent implementation of plans for the further development of production forces in Siberia and the Far East.

The task of the economic development of the BAM zone was determined, on the one hand, by the great geological discoveries, and on the other, by the



emergence during the Seventies of new socioeconomic and scientific and technical opportunities for the economic development of the Near North.

The problem of economic development in the BAM zone is a logical extension of a number of other regional programs implemented on the territory of Siberia and the Far East. One important prerequisite for its promotion was the creation of a powerful fuel-and-energy base in the Angara-Yenisey region, which has made it possible to form territorial-production complexes there for energy-intensive and heat-intensive production. These complexes serve as the main support bases, or more accurately, the economic outposts, for construction work and for providing the manpower and material-technical support for the new construction site. The other objective prerequisite in posing the problem of the economic development of the BAM zone has been the building of Komsomol-na-Amure and the general development of the Soviet Far East.

BAM is creating the conditions for two-way "West-East" communications. With the development of the Yuzhno-Yakutsk coal basin, in which coal recovery is done mainly by strip mining, a qualitative change occurred in the balance of cooking coal in the USSR. In the long term, a fourth metallurgical base will be created in the East of the country and this will become a center of gravity for other production facilities in the pioneering regions (primarily machine building and chemicals), and will result in major shifts in the territorial proportions in the location of the most important industrial sectors. Since in fact BAM starts from Tayshet and ends in Sovetskaya Gavan, it can be considered that sections of this main link have already for 35 years been participating in the economic development of the Siberian Near North, the eastern part of Khabarovsk Kray, and Sakhalin Island. It played an important role in the construction of the Bratsk GES and the formation of the Bratsk territorial-production complex, the construction of the Ust-Ilimskiy GES and the Korshunovskiy Iron-Ore Mining and Enriching Combine and the development of industry in the cities of Komsomolsk-na-Amure and Sovetskaya Gavan.

With the construction of BAM eastward new opportunities were opened up for the economic development of timber resources in the Verkhnelensk region and the formation of the Severo-Baykal territorial-production complex, including the lumber workings and the "Molodezhnyy" Asbestos Mining and Enriching Combine. The volumes of timber procurement for the country's domestic needs and for export to countries in the Pacific basin are growing on the base of the enormous forest areas, and significant prospects are opening up for the rapid development of a lumber and pulp-and-paper industry.

The construction of electric power stations in the regions influenced by BAM and the northerly location of the main line are providing incentive to combine the electric power systems of Siberia and the Far East, which may also include the power system developed in Yakutiya (BAM is creating favorable conditions for development of the latter). Together with the power links between Siberia and the Far East planned earlier along the Trans-Siberian Railroad Main Line, in the BAM region the electrical networks are making it possible to effectively combine the three systems and include them in the country's unified electric power system. As this is done, thanks to the reduction in reserves and by making use of the differences in the time zones a considerable

saving will be achieved in the capacities of the power stations, the reliability and flexibility of electric power supplies will be improved, and the territory enjoying centralized electric power supplies will be enlarged.

New land in the valleys of the northern rivers will be opened up and brought into agricultural use in the BAM zone, and new sovkhozes and subsidiary industrial enterprises will spring up. In addition, the eastern section of the new line will make it possible to considerably relieve the load on the Trans-Siberian Main Line from Khabarovsk to Vladivostok and Nakhodka and increase the movement of national economic freight via the port of Vanino.

It is clear from the above that the economic development of the BAM zone is designed to play a major role in developing the production forces and using the natural resources of Siberia and the Far East and in developing centers of socialist industry. This is why it must be regarded as a major territorial problem whose resolution will open up new opportunities for the economic development of the eastern regions of the country during the coming decades.

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Our country has gained colossal experience in the economic development of the North, Siberia and the Far East. Life has provided impressive examples of the economic subjugation of space. However, the task of rapidly and efficiently bringing new territories into the national economic system has never been one that is easily resolved, nor is it so now.

The grandiose program for developing natural resources and forcing the pace in the development of production forces, and the complexity of the problems that arise have no analogues in the building of socialism and they predetermine the need to select carefully the means and methods used to achieve the goal that has been set, to substantiate scientifically the decisions made, and to carry out a broad range of basic and applied research.

The scientists have already done much to work out the strategy and tactics to be used in opening up the natural storehouses in the eastern regions of the country and accelerate the inclusion of their riches in national economic turnover. It can be stated with confidence that Soviet scientists have not, perhaps, given so much of their attention to any one national economic program. More than 130 institutes and planning-and-design establishments are engaged in research on more than 70 themes. For decades their activities have been coordinated by the USSR Academy of Sciences Scientific Council on BAM problems. It has held three all-union scientific-practical conferences at which there has been thorough discussion of questions concerning the comprehensive development and rational use of the natural resources in the BAM zone. Materials from the conferences have become the scientific basis for practical solutions to many problems involved in the construction of the main railroad line and the socioeconomic development of regions contiguous to it, and the development of a comprehensive program for the economic development of the BAM zone.

The out-of-town sessions of the council, with participation by workers from the central apparatus, leading specialists and representatives of the local

party and soviet organs, have made an important contribution to solving key problems on this great construction site. The resolutions adopted at these sessions have done much to help the accelerated construction of the most complicated sections of the track, improve the reliability of operations on the main line, and start ahead of schedule on the working of certain unique deposits of natural resources.

The strategy chosen for scientific support has made it possible to determine the main directions and stages in economic work in the BAM zone, bring closer to completion the comprehensive geological study of the mineral and raw material resources and establish a sequence for working major deposits of useful minerals, and clarify ways to solve many of the economic and social problems, which include the priority sequence for developing a number of sectors at the various stages in the opening up of the new regions, creation of the food base, human adaptation to the extreme natural and climatic conditions, the formation of manpower, and environmental protection.

A leading place in the BAM Council's coordination plan for scientific research is now occupied by questions associated with working out the specific stages and tactical approaches in resolving economic tasks connected with the location and structure of the territorial-production complexes, the creation of the social and everyday infrastructure, and the settlement of new regions. Here, special attention is being paid to those questions that still remain outside the scope of the economic organizations or that have not yet been adequately resolved.

Implementation of the comprehensive long-term program for the economic development of the BAM zone will require additional manpower on a large scale, resulting in the near future in a population of more than 2 million in the regions adjacent to the railroad line.

Now, when our economic development is becoming more complicated by the declining growth of the able-bodied population, the manpower problem is becoming especially urgent. This predetermines the importance of studies of socioeconomic factors associated with recruiting and permanently settling manpower contingents, forming a stable population, insuring optimal conditions for vital activities, and pursuing an active labor-saving policy.

The construction of BAM and the start made on opening up new regions have already given rise to many large-scale socioeconomic problems that have not yet been finally resolved. These include the very complex problems associated with providing adequate labor resources for the development process: by the time intensive development was started virtually none of the new economic regions had an adequate demographic potential; this will undoubtedly dictate the need to recruit population from other parts of the country. This process is extremely complicated: the level of planned management for the labor force is considerably lower than management of the material factors of production. Although a socialist society does have opportunities for the rational organization and disposition of social labor, including in the territorial aspect, realization of these opportunities requires consideration of numerous factors in which elements that can in principle be controlled stand cheek by jowl with random elements resulting from individual interests, goals and



motives for the behavior of the individual people participating in social production.

Thus, manpower management is becoming a crucial sector in realizing plans for the long-term development of the new territories. Success in this matter depends, first, on the options for the economic development of the zone without detriment to its own manpower growth; second, on the aggregate requirements of the new regions in determining the quantity and quality of workers; and third, on migration activity in society. It is a question of a complicated interweaving of social and personal interests and the trends in the formation, development and realization of these interests, which determine the effectiveness and results of manpower movements and in the final analysis the opening up of the new regions. In past decades the situation has been quite favorable for the new regions. For example, the Far East alone obtained more than one-third of its manpower thanks to migration during that period. We note that this not only made it possible to largely satisfy direct needs for manpower but also exerted a positive influence on the conditions of natural reproduction in the region.

As is known, however, in the long term it will be more complicated to provide an inflow of migrants into the newly opened up regions. On the one hand, marked changes are taking place in the country in manpower reproduction: during the Eighties growth will be only one-fourth of growth in the previous decade. On the other hand, manpower requirements are growing substantially, and these requirements are felt not only in the new economic territories (for which, according to some assessments, there will be more than 100 administrative-territorial regions in the near future), but also in zones that were developed long ago, even those that until quite recently had a manpower surplus. The "discrepancy" between manpower supply and demand and the continuation of this situation in the future are raising the problem of providing the new regions with a "first production force" as one of the most urgent.

Present-day practice employs an extensive range of methods to form the migration inflows into the regions of new development. Use is made both of the organized form of migration and random forms based on stimulating the migration interests of workers by means of creating a certain "difference in potential" between regions of the country, such as can be used to achieve given goals in life, such as improving one's material position, a change of social status and so forth.

Economic levers are made attractive to recruit workers for the new regions; these include regional coefficients for wages, extra payments for the nature of work, various kinds of privileges, and priority supplies of goods enjoying increased demand. However, we should not exaggerate the significance of material interest. A considerable proportion of those taking part in the construction, and not only those who come on public assignment, regard the opportunity to enjoy an active position in life, enthusiasm and civic duty as motivating factors. These aims motivate thousands and tens of thousands of people who wish to participate in the opening up of the new regions. This situation is especially typical for regions that are socially prestigious and have the status of construction sites of national importance. We recall that

during the first year of the BAM construction alone, the public and production organizations that were engaged in the construction or were exercising patronage over the BAM received more than 150,000 letters from citizens who wished to be part of the "construction site of the century." Tens of thousands of people have traveled out to the construction site independently, without any agreement made beforehand.

At the same time, most of those who do go out there "have a return ticket in their pocket." In other words, the intensive inflow of manpower is usually accompanied by an outflow. In virtually every newly developed region, including the most prestigious of them, two-thirds of those arriving do not stay more than 3 years. In physical terms alone the harm that this "changing of the guard" does to society amounts to enormous sums: there are the thousands of direct costs spent on recruiting and setting up the worker, and the indirect losses from the migration connected with the worker's departure from the sphere of social production; and moreover, for quite a long period (an average of one month). And even though it is quite complicated, we must also take into account the nonreimbursable losses that are carried by the developing region when qualified manpower leaves after it has gone through social and physical adaptation to the difficult and sometime extreme conditions. Studies have shown that this process is quite protracted: a worker needs from 6 to 18 months to achieve full professional and functional productivity.

More often than not departure from a newly developed region is the result of a worker achieving the goals he set for himself or of some change in his goals; and this is promoted by the slant of the forms used to attract workers for a specific period of work. The 3-year period, in particular, is popular; it is stipulated by the Komsomol travel authorizations and by the placements following graduation from a VUZ, and in the labor contracts concluded at the employment offices.

The short periods that migrants remain in the region and the protracted period needed for the process of development of the region are resulting in a need to maintain an intensive inflow of resources into the region virtually throughout the entire period of economic development. The intensive turnover of manpower resources in the new regions has become, to use the apt expression of academician A.G. Aganbegyan, "large railroad station buildings" in which "suitcase" attitudes reign. This kind of situation can be observed in virtually all the new regions regardless of their natural conditions or the departments that are involved in the development, and so forth.

As a result of this, and in general of a negative process that is not amenable to control, the economic indicators for the development of the new regions are declining. Now virtually out of control, the replaceability of labor offers no opportunity for planned replacement and maintaining within normative frameworks the number of those employed at the construction sites and enterprises in the territories being developed.

Obviously the task of forming manpower resources in the newly developed regions should be formulated as a search for consensus measures that, even if they do not reduce the random character of manpower displacement to a minimum

in the new regions would at least include manpower within a framework corresponding to the national economic ideas on criteria for the advisability of allowing economic expenditures, taking into account the entire complex of temporary parameters in development, namely, current, medium-term and long-term expenditures.

The formation of manpower resources is still being done mainly by a trial-and-error method. There are trials and errors for the migrants themselves: according to the results from a sample poll conducted by the USSR Academy of Sciences Far Eastern Scientific Center Economic Studies Institute, more than 60 percent of migrants leaving the regions of new development pointed to the overestimation of their own physical and spiritual possibilities. There are trials and errors for the organs organizing the migration: each premature departure before the end of an agreed period is proof of the error. It is obvious that under present conditions, when the manpower shortage dictates the most economical use of it on each section of social production, the use of such methods in no way justifies itself and the costs to society for providing manpower for the new regions is too great.

Economic practice needs an arsenal of qualitatively new methods that make it possible to match to a maximum the interests of society and individuals, taking into account the very complex macroeconomic and microeconomic problems that arise in providing manpower for the economic development of the new regions. And first and foremost they should be concerned with the process of forming an initial flow of migrants because it is precisely here that the advantages and defects in further providing the economic development of the new regions with manpower and the planned utilization of the labor potential are genetically predetermined.

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As already noted, the socialist organization for providing manpower to insure the economic development of regions being newly opened up has quite a number of forms, both organized and random. Their relationship during the various periods of time and in the different regions is not the same. Migration is now taking place mainly in an unorganized form (up to 80 percent of displacement), but in especially important cases the proportion is considerably lower. Thus, during construction of the BAM more than half of the workers were recruited on a planned basis. Quite a large number of variants have been tested for this: use is made of individually recruited workers, the conclusion of labor contracts within the framework of the employment offices, the transfer of workers in connection with the relocation of enterprises, the organization of volunteer detachments in response to public appeals, assigning young specialists for work, and so forth.

Practical work in opening up the new regions gradually selected from this broad range of options the most efficient methods, and it has been constantly improving them in order to implement the complex economic programs. Experience gained during the process of building the BAM is invaluable in this regard. Now, a decade after a start was made on the construction, it can be said that the testing there of virtually all the methods used to form and augment the labor force and the practical activity of the contingents of



workers formed from among migrants, and the various methods used to attract them into the new economic region have all been a unique kind of economic experiment that has provided voluminous material for the assessment and comparative analysis of various economic and organizational methods for the purposeful displacement of manpower, and for studying and critically considering them and choosing the most rational directions for improving the system for controlling migration processes.

There is special value in the circumstance that, along with the organs traditionally engaged in handling the labor force, the economic and public organizations have also had broad opportunities for initiative and a certain independence in choosing the methods used to form contingents of people for the development. For a long time they have been able not only to test the various methods for recruiting workers but, when assessing the results of this activity, to improve the forms.

The full reckoning of results and generalization of the experience gained lie ahead. However, attention can already be directed to certain substantial results in this work.

One very important factor in organizing migration into the zone of the BAM construction has been the practical recognition of the fact that although as a rule the existing forms used to recruit manpower into the newly developed regions make it possible to obtain the necessary numbers of workers, nevertheless the indicators for the labor potential created are reflecting increasingly poorly the real picture in providing manpower for the new region.

First, in the newly developed regions what is needed today is not simply workers in general but a labor force with quite rigid qualitative characteristics: one that is professionally skilled and educated. Technology is being used extensively today in the development process and the level of work specialization is quite high; and this places even more stringent requirements on the quality of the labor force, and therefore it is necessary to select workers beforehand and take more fully into account the match between the individual production characteristics in the parameters of vacant work places.

Second, the need to organize work in foreshortened time periods and in the severe conditions of the uninhabited northern territories has required particular attention not only to the professional but also the physical and moral qualities of future construction workers. The move into a new region always involves a quite sharp change in the natural and social environment and, this means, a change in a person's way of life. This places special demands on the physical and intellectual abilities of those wishing to participate in the development of the region, and on their suitability for pioneer activity, their psychological stability and so forth.

Making this selection makes it possible to combine to the maximum the interests of the individual and of production in the new region. But how is this done? Practical work has shown that this task can best be solved by the organized recruitment of workers for the new region as part of production collectives formed beforehand and having production experience, and that are

structured and have at their disposal active public organizations. It is precisely here, in the basic cell of production, that someone wishing to work in the newly developed region undergoes a preliminary and comprehensive check in terms of his qualities, and it is precisely here that the initial selection of workers is made, which, of course, cannot be done in a centralized way when forming a labor potential many thousands strong.

The effectiveness of this kind of approach in selecting the first construction workers was graphically demonstrated by the activity in the construction of the BAM by patronage detachments created in all the union republics and in 30 krais and oblasts of the RSFSR.

Creation of these detachments marked the start of a qualitatively new stage in participation in the opening up of the new territories by regions engaged in traditional economic work, which previously had limited themselves only to sending volunteers. In this case, the patronage sphere came to include the completion of an entire complex of work at "their own station"—from the design and delivery of materials and equipment to the handover of fully constructed settlements with the entire complex of social and cultural and everyday services.

But it is not only the new production tasks that have been resolved by the republic patrons. One important factor in their activity has been "social planning" for the new collective and the scrupulous selection of specialists—from rank-and-file workers to managers—delegated for construction work under the extreme conditions of BAM.

It is probable that this has also been the main reason why the patronage detachments at the construction site have not experienced many of the difficulties that have been typical of other formations. For whereas most of the construction organizations were made up of workers who before their arrival had been given only the most general of ideas about the actual working conditions, the sphere of their activities, and the goals and personal qualities of their colleagues, the patronage detachments were formed from people each of whom occupied his own "personal niche" in the production and social architectonics of the collective. Accordingly, within the organization there was no intensive displacement of workers along either the horizontal or the vertical, that is, in these detachments no excessive shifts were observed in work place in search of new work and there was none of the trial-and-error method for selecting managers that is usual for the new collectives and that does great material and moral harm. Professional construction workers, skilled vehicle operators and trained managers arrived at the new construction site. These patronage detachments were strikingly distinguished from other formations that had the kind of qualitative characteristics for professional training such as required the organization of special training within the framework of the "Every Bambovskaya person must have a construction specialty" movement.

Third, it was not simply a group of people that was sent to the construction site but a collective with a high level of interpersonal relations, a favorable social and political climate, and developed creative cooperation and mutual assistance, and that had a socially active nucleus and party, Komsomol

and trade union organizations. The already formed common nature of the aims and interests of workers in the patronage detachments was seen in the fact that at the BAM construction site they had the best indicators for labor and production discipline and for personnel turnover, and, moreover, the last-named process takes place there in a predominantly planned way. The patronage enterprises remained as subdivisions of the republic ministries and administrations and departments located in the corresponding krais and oblasts. The personnel at these subdivisions were oriented beforehand on a set time for working on BAM--the "long watch"--and the chief motives for leaving the patronage detachments is the end of the contractual period or transfer to a new place of work. Thus, we have here an opportunity to program and control personnel mobility in a rational way. Organizations that send out workers to BAM can replace them in a planned way, and this makes it possible for the ministries and administrations on the one hand to participate successfully in work on the BAM, and on the other, not to complicate the manpower situation at places that people are leaving.

Fourth, the patronage detachments are characterized by an extreme degree of personal and collective responsibility. Their work is a demonstration of the achievements of an entire republic, kray or oblast not only in construction but also in architecture and, perhaps, in the field of culture. It is not surprising that among the patrons the quality of plans for housing settlements and the quality of work done are also higher. This is also helped by the successful economic organization of the work. Virtually every detachment receives, as it were, a "single duty detail" to create a new station. Each settlement has one planner, one contract organization and one person responsible for its comprehensive development, that is, there is no possibility for the emergence of the departmental separateness so typical of many new construction sites (and not of them alone).

These patronage methods have been realized with particular success by the Ukrstroy and MoldavBAMstroy collectives. A great deal of planned organizational work beforehand by the organizations in the Ukraine and Moldavia enabled the collectives of construction workers to adapt to the new conditions very quickly. Projects for the social and production infrastructure were completed in less than a year in Ural and in only 3.5 months in Alonka, and the work front was fully developed. The workers did not have to endure the burdens of a muddled everyday existence, as other detachments did, and they had no need to organize their housing as some kind of "self-help" after a strenuous work day; all these problems had been systematically and thoughtfully solved by the Ukrstroy and MoldavBAMstroy collectives, which were formed as collectives of workers of the most capable age groups with a good level of skill and education and considerable experience. The qualitative makeup of the labor force in these subdivisions was considerably better than that of the general indicators for the Bambovskaya area. Thus, a large proportion of the members of the collectives have more than 5 years work experience while the average rating is 4.1 years. The construction workers' general educational level is also sufficiently high: almost all of them have a secondary or higher education. When making up the complements of the detachments consideration was given to the age structure of the production collectives, which insured priority for production and social



experience: about the same numbers of workers aged up to 30, from 30 to 40, and above 40 were assigned to the groups.

The correctness of the tactics chosen in forming the patronage detachments in the Ukraine and Moldavia and of the ways selected for providing support for them is confirmed by the economic results: the Ukrstroy construction workers, for example, fulfilled the plan for the 10th Five-Year Plan 122 percent. Labor productivity growth rates are particularly high: during the five-year plan the Ukrainians improved them 32 percent. The Moldavian construction workers also overfulfilled the production plans. We also note important factors in economic activity such as steady rhythm in fulfilling plans, the outstanding and good quality of the work done, and the reductions in planned prime costs.

The economic and social advantages of this kind of approach to the formation of labor resources were also demonstrated by the development of forms like public appeals to recruit workers for the newly developed regions. They are used extensively in practice because they make it possible to recruit for work on an immediate basis considerable contingents of workers with high social maturity who are morally prepared to overcome the difficulties that arise. As a rule, however, those arriving do not have production experience and the necessary skills. This sometimes leads to a situation in which young people from construction detachments have for a long time been unable to play a full part in the development process, while the production detachments have taken a long time to assimilate the training combines. Of course, it is not sensible to tolerate this kind of situation and the methods for organizing work with young volunteers have been improved. Whereas in the beginning the public appeals were organized only in the form of mobilizing and delivering the fighters to the construction site, subsequently the basis for this became the formation of a production collective, that is, at the mobilization sites there was not only preliminary professional training but sometimes a quite long (up to 3 months) probation period for candidates before admission to a detachment. This has made it possible to select people who meet the stringent requirements not only professionally but also morally. Use of these methods has enabled the members of the detachments arriving at the BAM to be included in production activity quickly, and this has been helped to a considerable degree by the significant increase in the proportion of trained fighters—from 20 to 30 percent at the start of the construction work to 70 percent now.

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The organization of collective forms for moving workers not only makes it possible to achieve high economic indicators but, as a number of studies have shown, is also an effective way of stabilizing the production collectives and settling workers for long periods. Of course, because of the long-term and dynamic nature of the development process, the collectives created using this method are not absolutely stable. The quite understandable process of workers leaving does occur. However, the permanent retention of a "backbone" of 30 to 40 percent of cadre workers makes it possible to maintain within a collective a high level of established relations, accumulate production and social experience, make efficient use of the institution of mentorship, and create and solicitously maintain enterprise traditions.

The steadiness and stability of the collectives of migrants during large-scale development exert a favorable influence not only on the activity of the enterprises in the new region but also on the functioning of the country's entire manpower system.

First, the process of forming the migration flows into traditional regions takes place in a more planned way and without harm to the labor potential. Effecting organized replacements of workers provides the opportunity over a long period to maintain the necessary balance in providing manpower both for the regions that the migrants leave and for the new region.

Second, this makes it possible to optimize the use of intraregional manpower resources. Usually the new regions, in which privileged conditions are created for wages and priority distribution, serve as a powerful magnet attracting the local population away from the traditional spheres of employment. As a rule, personnel turnover among the initial construction workers and the freeing up of work places act as an incentive for increasing intraregional migration activity. Increasing the mobility of the population living there reduces the availability of manpower for the regions' economies, which, are already short of labor without this.

The set of organizational forms used during the construction of BAM has prevented the development of these kinds of negative phenomena on any major scale. The opening up of the new territories is taking place without any tangible decline of the labor potential in contiguous regions.

It can be confidently stated that no major program for the development of new regions has had such a rationally organized redistribution of manpower as has the Bamberovskaya region. It illustrates brilliantly the need to conduct work to raise the level of planned redistribution of manpower and—the chief thing—highlights the promising directions in such activity. The use of various conditions and forms for making up the complements of the BAM detachments and recruiting contingents of workers who are distinguished by their production and life's experience, and according to skills, age, education and so forth, provides opportunities for comparing the results achieved and choosing the most efficient of them, and in the final analysis, for avoiding mistakes when forming the labor force for the new regions, drawing up recommendations for improving forms and methods, and disseminating the positive experience that is gained.

The process observed in recent times whereby a switch is taking place from individual migration moves to migration within a formed collective reflects one of the main trends in socialist development, refracted in the unique conditions in the regions of new development. It is a question of the growing role of the production collectives—a basic economic, sociopolitical and spiritual cell of socialist society. Giving consideration to the changes taking place makes it possible to approach in a new way the question of the planned provision of manpower for the regions.

Available production experience convincingly shows that when a contingent of workers for the new regions is formed into a production collective this

results in tangible social and economic results. It is precisely the collective, like no other organization, that is capable of fulfilling the function of ideological-political, labor and moral indoctrination, insuring a merging of individual and societal interests, and orienting the worker on the socially important values. And here, the collective does not suppress individual aspiration but on the contrary promotes its development.

The personal motives for a person's behavior do not disappear in the new region. As previously, they play an important role; but in the collective it is social interests and concern to maintain the group status that are moved to the forefront. In the collectives arriving in the region of new development the socialist principle of the responsibility of each member of the collective to the collective, and of the collective to each of its members, is developed to an exceptionally high degree. This makes it possible to resolve correctly the complex questions that arise during the process of production activity in the region of new development.

The organized movement of workers as part of formed production subdivisions makes it possible at all stages in the development, to realize in full measure the rights and obligations laid down in the law of labor collectives and enhancing their role in enterprise management. The use of this method as a main method in opening up the numerous new economic regions can make it possible in very short periods to satisfy the requirements arising for sending up the full complement of skilled personnel, which is so very important for the national economic projects. And here, the considerable negative effect exerted on efficiency in the processes of moving manpower when selection is not controlled and the occupational makeup of manpower and its social maturity and level of physical and moral adaptation to the complex conditions are disregarded, is neutralized.

One important consequence of this kind of approach has been the significant improvement in the planned nature of providing manpower for the regions of new development. Basically, it has become possible to agree to the plan for manpower recruitment with the plan for development of the new region in terms of scale, time periods, the conditions for accepting new contingents and so forth. At the same time, the sufficiently high level of stability in these collectives makes it possible to program more accurately the processes of worker departure and displacement.

The use of consolidated forms for the movement of workers makes it possible to achieve more purposeful economic incentive for workers employed in opening up a new region. In particular it is possible to place at the disposal of the production collectives part of the assets now spent on recruiting manpower. This makes it possible to stabilize them even more and make efficient use of their production potential.

However, the direct economic results from the use of collective migration into the newly developed regions are not exhausted merely by the increased efficiency in developing the new territories. In one respect collective migration can act as a regulator for the processes of interregional and intraregional displacement of manpower. Insuring a balance between the number of work places and the planned recruitment of manpower in the new regions



exerts a marked effect on reducing the intensity of processes involving nonorganized migration, whose scales are now exerting an adverse effect on national economic development rates. It is obvious that random processes in the displacement of manpower occur mainly as the result of the high guarantees that virtually anyone can secure a work place when he arrives in a new economic region regardless of his professional training and skills. A higher level of planned filling of work places through the practical introduction of new forms of manpower recruitment makes it possible to reduce overall migration mobility in the population and thus increase the total fund of working time. This applies both to external and internal migration in the newly developed region.

In effecting the processes of moving manpower as part of production collectives an important place should be occupied by solving the question of the tasks facing them and the time frames for doing this. Now, when evaluating the effectiveness of migration processes the criterion often used is an indicator for the permanent settlement of migrants in the new region. The basis for this approach is the viewpoint that the longer a worker arriving in the new region is employed (regardless of the sphere of activity) the more advantageous this is. From this kind of viewpoint, economic behavior by a migrant aimed at a permanent shift in the kinds and objects of labor is the optimum. For example: road construction to the construction of an industrial project to work at a permanent project. It is possible that there is some truth in this. But not the entire truth. Obviously, this version is advantageous when using workers with poor professional habits and skills. The use of specialists as a reserve for filling "professional niches" during the process of developing a region leads to the loss of experience that they have gained and their skill and professionalism, and this is hardly rational. Rather, on the contrary, it is precisely these qualities of workers that become the most valuable in the present processes of development. Studies have shown that the use of highly skilled manpower as part of an aggregate with progressive equipment makes it possible to significantly reduce costs in providing manpower for developing regions compared with the recruitment of a poor quality work force.

Obviously, it is precisely the highly skilled, readily adaptable both physically and morally, and mobile "enthusiasts" (passionarnyye), to use the definition of historian L.N. Gumilev, who should make up the main part of the collectives opening up new frontiers. And as far as they are concerned, it is more correct to optimize the period of their sojourns in the new region than to try to get them to remain there permanently. The latter task is relatively independent and requires special measures aimed at the purposeful recruitment of different contingents of migrants, namely those with little potential mobility; this is essential for forming a full-fledged demographic structure and insuring reproduction of the settled population.

This means that the formation of manpower flows into the new regions should take place in several stages, and at each stage the organization of migration should be subordinated to precisely formulated goals—either providing manpower for pioneer development and creating the bases for the production and infrastructure systems, for which it is rational to use mobile, specialized collectives, or creating a stable population in a region. Shifting goals and

the attempts to find some universal solution for all tasks in the development of new territories sometimes lead to internal contradictions in the system of measures and reduces their efficacy.

The basic need for specialized solutions to the problems of the planned provision of manpower to develop new regions during the pioneer stage, during which what is needed is the best physically and morally prepared migrants capable of effecting the process of penetrating into the new territory and creating there under extremely complex conditions the base points for mass resettlement, was worked out as long ago as the Twenties. For historical reasons it has not been possible to test these ideas or make extensive trials in practice. Obviously, at the present stage in national economic development, when the development of new regions has become a phenomenon of economic life, the time has come to work out methods for improving the planned nature of manpower flows into newly developed regions and solving in a purposeful way the tasks set for economic practice.

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Ahead lie new tasks. The zone of active economic activity now covers about half the territory of our country. The other half still has to be opened up. And efficient provision of manpower for the new regions is the guarantee for obtaining the very valuable sources of raw materials and energy.

And in order to carry out this work, incalculable importance is attached to the experience gained in organizing manpower for the new region along the BAM. It is not fortuitous that in implementing one of the largest national economic programs of our time--the development of West Siberia--the method of republic patronage over specific projects is being further developed. The initiative of a number of republics for their construction organizations to participate in building housing, social and cultural and everyday projects and highways in West Siberia has received support and approval. Thus, an important social experiment continues and the BAM development will provide additional return for the country's economy, a return that will be obtained in all the newly developed territories.

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## REGIONAL DEVELOPMENT

### NEGLECT OF LIVING CONDITIONS THREATENS FAR EAST DEVELOPMENT

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[Article by Ye. Milovanov, USSR Gosplan deputy commissioner for the Far East Economic Region, and N. Singur, USSR Gosplan subdepartment chief: "Planning for the Social Development of the Far East"; article offered as a discussion point]

[Text] The national economic complex of the Far East Economic Region is of great importance in the all-union division of labor. The (new edition) of the draft CPSU Program notes that "development of the production forces of Siberia and the Far East has been and remains an integral part of party economic strategy." [1] This results from a number of factors, primarily the presence in these regions of various kinds of unique natural resources that are often in short supply in the country.

An extensive range of the country's nonferrous, rare and precious metals and diamonds are concentrated in the Far East, along with major reserves of iron ore, hard coal and timber, and also fresh water and hydropower resources. More than 40 percent of fish and products from the sea are harvested in the region, together with large amounts of various kinds of valuable furs and various sorts of the so-called gifts of nature.

The specific geo-economic location of the Far East is of great importance. Its production potential plays an important role in developing economic ties with contiguous countries in the Pacific basin. The countries of that region assess the socioeconomic achievements of the Soviet Union through the prism of their realization under the conditions of the Far East.

The party and government pay constant attention to developing the economy and culture of this region. During the last 20 years a number of measures have been implemented for the comprehensive development of production forces in the Far East.

Taking into account the important role of this region in the country's national economic complex it was deemed expedient, starting from 1968, to draw and confirm the main indicators for the development of the Far East simultaneously with the national economic plans, having in mind insuring the dynamic and comprehensive development of production forces in the region and



the interconnected and proportional development of the production and nonproduction spheres of the economy.

All of this exerted a positive effect on the region's development. In two five-year plans (1971-1980) dozens of major enterprises were constructed in the various sectors of the economy, including enterprises such as the Vilyuyskaya GES, the Zeyskaya GES, the Bilibino Nuclear Power Station, the first section of the Primorskiy Mining and Enriching Combine, the first section of the Vostochnyy deepwater port (the coal and container terminals and a complex for loading special lumber [tekhnologicheskaya shchepa], the Vanino-Kholmsk steamship ferry, the Bambovskaya-Tynda-Berkakit railroad line and others. During the 11th Five-Year Plan through movement was opened along the entire length of the Baykal-Amur Main Railroad Line and full capacity was reached at the Neryungri Open-Cast Coal Mine and the Coal-Dressing Combine, and at the Neryungri GRES; and construction was started on the Kolymskaya GES, the second section of the Vostochnyy port and other projects.

During the last two five-year plans the volume of industrial output in the Far East Economic Region has quadrupled.

During the period 1971-1985 (taking into account the 1985 plan) about 50 million square meters of housing [2], general-education schools and a number of other social, cultural and everyday projects were commissioned.

The achievements in developing the production forces of the Far East are beyond dispute. Recently, however, the rates of economic and social development in the region have been declining. Until the Seventies the region's economy was developed at rates that outstripped the all-union rates, while during the period 1970-1980 growth rates were somewhat lower than for the country as a whole. This trend also continued during the 11th Five-Year Plan.

Analysis of the development of the economy in the Far East during the last 3 years of the five-year plan shows that many factors influence the rates of economic growth: the sector structure of the economy (including the correlation between the raw-materials and processing sectors), and proportionality in the development of specialized and other sectors (such as the fuel-and-energy, construction, construction materials, and transportation industries).

Given the great importance of these factors, the availability of manpower for enterprises and organizations in the economic complex exerts a direct effect on economic growth rates in the region.

As a region that is being opened up the Far East has a shortage of labor even though manpower growth rates are higher than for the RSFSR as a whole.

As is known, the numerical strength of the population and of manpower resources in the Far East is growing to a considerable extent through the inflow of workers and specialists from other parts of the country; and this occurs not only through the organized recruitment of manpower by ministries and administrations for subordinate enterprises and the resettlement of

families in rural and farming regions, but also through the unorganized inflow of the labor force. And here, during the 10th Five-Year Plan, for example, the organized forms of importing manpower to the Far East made up a considerable proportion of the total inflow of population into the region. However, despite the steps taken, the region's national economy has always experienced manpower shortages.

The task for the ministries and administrations and the central and local soviet and planning organs is to create in good time the necessary conditions for the permanent settlement of the population moving to the Far East. The entire set of these conditions includes creation of the required number of work places, development of the agro-industrial complex so as to provide the population with foodstuffs, and finally and of particular importance, the corresponding development of the nonproduction spheres, namely the construction of housing, preschool establishments, schools, hospitals, clubs, and sports facilities, the development of the municipal economies and so forth.

This is described with the utmost clarity in the CPSU Program (New Edition): "When opening up new regions, special economic and political importance attaches to strictly insuring a comprehensive solution to production tasks and development of the entire social infrastructure in the interest of improving working conditions and people's lives." [2]

All this is also important because the permanent settlement of the population arriving, including its involvement in the production process, will make it possible to recoup more quickly the cost of importing and settling the work force; these costs are considerable, amounting to R17,000 to R20,000 per worker coming to the Far East from the central regions of the country (including the creation of work places and essential social and everyday conditions for the worker and the members of his family).

In recent years measures have been adopted to improve the material well-being of the population in the Far East, including the introduction of or increases in the regional coefficients, the percentage increases to wages established for many categories of workers and employees for uninterrupted periods of work, the lowered zonal prices for foodstuffs, the allowances granted for resettling families in agricultural regions, and so forth. All this has helped in settling the population permanently in the Far East. However, population mobility in the Far East region, particularly in the southern region, and including movement out of the area, remains high.

One of the main reasons for this situation is that in terms of a number of indicators, conditions in the Far East are not as good as in the central, and even more the southern areas of the country. By living conditions we mean primarily the provision of well-built housing with proper amenities, children's preschool establishments, schools, hospitals and other social and cultural and everyday facilities. Sociological studies show that for the adult population, living conditions and the opportunities for their children's education, including the aesthetic and physical conditions, are acquiring increasing importance in the matter of settling the population permanently in the Far East, particularly young and older workers and employees and

engineering and technical workers with children, for whom they want to provide an all-around education and development. The parents themselves are also making greater demands in terms of leisure conditions, opportunities for engaging in sport, tourism, and so forth.

The ministries and administrations and the local soviet, planning and economic organs are permitting serious lack of work in this regard. It was precisely to this that CPSU Central Committee general secretary M.S. Gorbachev drew attention in his speech at the conference of the party and economic aktiv in Tyumen and Tomsk Oblast: "Attitudes toward people and concern for them is the major question of our policy. And for regions that are being newly opened up this acquires special importance." [3]

Unfortunately, many examples could be cited, showing the inadequate attention paid by ministries to the development of the social infrastructure in the Far East. Along with the commissioning of the two sections of the Vostochnyy port in Maritime Kray, according to the project plan a total of 201,000 square meters of housing was also to have been commissioned, along with a general-education school for 1,500 students, two kindergartens each with 280 places, a pediatric polyclinic with a patient throughput capacity of 250 per shift, a disease-prevention facility and a pioneer camp. Of this list, by 1984 all that had been commissioned were 85,000 square meters of housing. Because of this, 850 people are still on the waiting list for housing, and 585 children are waiting for the construction of the children's preschool establishments. Shortages of workers in occupation such as fitters, loaders and a number of other are as high as 30 to 50 percent.

Lagging in the development of the construction complex is a substantial cause of the inadequate rates seen in the construction of production sphere projects in the region. During the period 1980-1983 the construction organizations failed to complete the annual plans for assimilating capital investments to the limits for the Far East as a whole, including nonproduction construction.

Analysis shows that the decline in the growth rates for industrial output has occurred simultaneously with the lagging of the Far East behind the RSFSR as a whole in terms of developing the social infrastructure. The amount of housing available is now 84 percent compared with the average for the republic. Compared with the RSFSR, other figures for the Far East include the following: provision of water for urban housing 87 percent compared to 91 percent in the RSFSR; sewerage, 81 percent against 89 percent; central heating 86 percent and 89 percent respectively; supplies of hot water 56 percent and 67 percent. The proportion of students in schools in the Far East studying in a second shift is 26 percent against 17 percent in the RSFSR; in the Far East the area of classroom per student is 12 percent less than for the RSFSR. Compared with 1965, the growth rates for trading areas in stores and seating in public catering enterprises in state and cooperative trade have been lower than for the RSFSR as a whole. Thus, instead of being above the all-republic level, the level of development for the social infrastructure in the Far East Economic Region is even below it for some per capita indicators. This trend can be explained by the reasons cited above and by the fact that in the last two or three five-year plans the rates of housing and social and cultural construction have not been in line with population growth rates in the Far



East. Even given the higher rates of housing construction and the construction of social, cultural and everyday projects in the Far East region compared with the RSFSR, the numerical strength of the population there is growing more rapidly than in the RSFSR as a whole. The position is made worse when in individual years construction rates in the nonproduction sphere in that economic region have declined relative to the RSFSR.

In the draft Main Directions for the Economic and Social Development of the USSR for 1986-1990 and the Period through the Year 2000, provision is made as follows: "In order to settle personnel permanently in the regions of Siberia and the Far East it is necessary to insure preferential improvements in the living conditions for the populations of those regions." [4] Development of the social infrastructure is an important factor in accelerating the socioeconomic development of the Far East. It will exert a direct effect on the assimilation of capital investments allocated for the sectors of material production and the production capacities commissioned.

As the Main Directions point out, in order to resolve this problem the ministries and administrations and the planning organs must "provide for the priority allocation of state capital investments for housing and social and cultural construction in the newly opened up regions of Siberia, the North, and the Far East." [5]

Realization of these propositions requires the adoption of a number of organizational measures, including improvements in planning both at the center and at the local level.

The main focus of attention should be on improving the mechanism used to combine sector and territorial management, primarily its central wing--planning. In our opinion, the present procedure for compiling territorial plans, including the main indicators for economic and social development in the Far East region (both in the USSR Gosplan, the RSFSR Gosplan and the local planning organs) has mainly a sector orientation and does not fully match development of the social infrastructure with the requirements of the region's economic development.

As is known, development of the nonproduction sphere in the region is being accomplished mainly by funding from the all-union ministries and administrations that have enterprises in that region, and by the local soviets of workers' deputies.

The USSR Gosplan determines the state capital investments for these purposes by ministry and administration and by union republic. In accordance with the territorial principle (by krais and oblasts), further distribution of this funding is effected only by the RSFSR Gosplan (like the gosplans of the other union republics that have oblasts).

However, in the summary housing construction plans broken down by kray, oblast and autonomous republic, the proportion of it planned directly by the local soviets is insignificant compared with the proportion planned by the sectors.

As a result of the features in the structure of the national economy in the Far East, in which sectors of all-union subordination dominate, the proportion of all housing commissioned in accordance with the plans of the local soviet is insignificant. Moreover, in these plans considerable volumes of the capital investments and the construction and assembly work are made up of allocations of funds to the local soviets from union ministries and administrations under procedures for shared participation, which in principle, cannot, in our opinion, be considered a successful methodological method in planning for the development of the nonproduction sphere in the regions, not least because they are not under the control of the central planning organs.

Thus, the sectors are of decisive importance in developing the social infrastructure in the krais and oblasts and the autonomous republic as a whole within the economic region. However, with the existing planning procedure, the local soviets cannot adequately and effectively influence given ministry and administration decisions. The time frames for compiling the draft plans are such that proposals and comments on planning for associations and enterprises are passed by the local soviets to the ministries and administrations during the period when they have virtually completed preparations for the draft plan as a whole, broken down by ministry and administration. The ministry or administration cannot make any major changes to the draft plan at the territorial level, which is based on control figures from the USSR Gosplan, because this draft plan has already been coordinated with subcontracting and other ministries. And the control figures for limits on capital investments and construction and assembly work passed by the ministries and administrations to their subordinate enterprises and associations are not agreed with the soviet and planning organs beforehand; and in fact agreeing them would be a very complicated and unrealistic task since the time frames for compilation of the national economic plans are very tight.

When working out the control figures for the limits of capital investments and construction and assembly work to develop the social infrastructure, the ministries and administrations have severe constraints in planning. First there are constraints on the very limits set as required to insure the volume of commissioning of nonproduction-sphere projects as established by the USSR Gosplan. Second, there are constraints on the volumes of construction set for the subcontracting ministries by territories. As a result of these constraints, priority in increasing the volumes of housing and social and everyday construction is assigned to the subcontracting enterprises and organizations located in economic regions where because of existing economic and natural conditions the cost of construction is lower and adequate capacities are available in the subcontracting construction organizations. These constraints decisively affect the adoption of decisions by ministries and administrations concerning the distribution of volumes of housing and social and everyday construction to subcontracting enterprises located in different (according to conditions) regions of the country; and this does not favor those enterprises located in regions just being opened up. Moreover, during the process of fulfilling the confirmed plans, tasks are often amended and completed in accordance with actual construction volumes. As a result, the enterprises successfully fulfilling the construction plan increase the

volumes of projects commissioned in the social infrastructure at the expense of other enterprises that do not fulfill the plan. And the ministry bears the responsibility for assimilating the funds and fulfilling the plan for commissioning not at the territorial level but for the ministry as a whole.

Each sector having at its disposal capital investments for development of the social infrastructure in the economic region acts independently, regardless of the others. Therefore, the aggregate effect of the sectors on the economic region is virtually unpredictable. When at the stage of the draft plans the soviets bring together the proposals from the sector associations and enterprises into a comprehensive plan for the kray, oblast and autonomous republic, when assessing and revealing negative trends toward decline in the columns of construction they must deal with a dozen or more ministries when they offer their suggestions for correcting the situation. In rare cases these suggestions are acted upon, but for the reasons enumerated above, most often they are refused or there is no response. In our view, a paradoxical situation has come into being. The social and everyday infrastructure, which mediates all phases of the reproduction cycle for manpower, is of a strictly territorial nature. But the planning for its development is done mainly on the sector principle and, as stated above, it is difficult to control its combined effect on a given territory. The lack of any effective lever of control is felt in a particularly negative way on the social development of regions being opened up, as seen in the example of the Far East.

Consequently, it is a question of improving the mechanism for the planned control of social development, first and foremost the development of the region.

The problems of rationally combining sector and territorial control and planning are not new and have always been resolved in accordance with the demands of the times during the various periods in the country's economic development.

In recent years, various measures to improve planning for housing and social and everyday construction have been proposed in a number of scientific publications and in the periodical press. Many authors have expressed the opinion that these functions should be transferred completely to the territorial management organs, freeing up the corresponding central organs. In our view, the total isolation of ministries and administrations from participation in development of the social infrastructure is inadvisable at the present time.

The experience in socialist planning and management gained in the countries of the socialist community indicates that the absolutization of any aspect of management--sector or territorial--leads ultimately to the appearance of departmentalism or parochialism.

Only a national economic center that insures primary observance of the national interests can combine in the optimal relationships the efforts of the sectors and territories in solving the problem under discussion.



Thus, the basis of this should be the principle of centralized territorial planning for the development of the social infrastructure. During the first stage it is advisable to switch to the kind of planning in newly opened up regions, as for example the Far East, in which the task of developing the nonproduction sphere is one of the most important.

Proceeding from the level of housing and social and cultural and everyday facilities available to the populations of the union republics and economic regions, the USSR Gosplan can establish control figures for any given region that are binding on the ministries and administrations (in terms of capital investments and project commissioning), proceeding from the costs of construction in the given region and the confirmed normatives for availability.

On the basis of the control figures, the territorial organs of the USSR Gosplan in the economic regions can, together with the local planning organs and with the agreement of the RSFSR Gosplan and the contracting organizations, prepare and present to the USSR Gosplan draft plans for housing and cultural and everyday construction, with best consideration of local opportunities and requirements. With the exception of certain ministries, it is advisable to transfer to the local soviets the functions of clients for this construction.

Given centralized territorial planning for development of the social infrastructure, within the economic region the interests of the sectors—the ministries and administrations—should be carefully considered. And here, both in the preparation stage for the draft plan and in the confirmed plan, tasks should be specified to allocate for the enterprises of ministries and administrations located in the economic region the area of housing, the numbers of places in preschool establishments, and the provision of other facilities in the social infrastructure in specific populated points. Fulfillment of these tasks should be under the control of the territorial organ of the USSR Gosplan.

One indispensable condition for improving planning for development of the social infrastructure is the development of a scientifically sound normativ base. Normativs for the availability of housing and other facilities in the social infrastructure for the populations of the economic regions and the administrative units located within them should be drawn up on a differentiated basis, taking into account local natural, social and demographic conditions. In the normativ for availability for the population of the North-East, for example, public health facilities must be considered essential for providing the population with opportunities for prophylaxis and adaptation and preventing occupational diseases. The normativ for availability for the population in the zone of the Baykal-Amur Main Railroad Link should include preschool establishments sufficient to provide places for all children of preschool age in kindergartens and creches so as to make maximum use of the available manpower.

The remoteness of the Far East from the main centers of culture and the arts can to some extent be compensated for by the adequate development of a network of multichannel television and radio broadcasting, movie theaters, cinemas and

concert halls and mobile art galleries and libraries. The corresponding norms for availability should take such compensation into account.

The norms providing for comprehensiveness in the construction of housing apartment blocks, microrayons, populated points and cities in the Far East should also be reviewed. The proportion of projects in trade and public catering, everyday services and communications provided for by the existing norms do not provide adequate comprehensiveness for housing construction and the qualitative indicators for consumer services. The existing norms are obviously inadequate for many populated points and cities in the Far East of a relatively "young age" and the inadequate level of development associated with this.

For the Far East the territorial norms will serve as one of the existing means for improving planning for the development of the social infrastructure, such as insure that the population is protected against the unfavorable natural living conditions, and help to attract and keep manpower resources.

The proposed centralization of territorial planning of the social infrastructure in the economic region requires improvements in the organization of and the technology used for working out the main indicators for economic and social development in the Far East, within the USSR state plan. This work now amounts essentially merely to the department for territorial planning collecting the proposals of the ministries and administrations on development for the enterprises subordinate to them in the Far East, including proposals on social matters. The sector departments are not displaying the proper activeness here. In terms of the time periods for plan compilation the department for territorial planning is also in no condition to make any deep analysis of the proposals from the ministries and administrations so as to reveal any disproportions or to discuss the draft plan beforehand in the Gosplan leadership, as occurs with the draft plans for the union republics.

The forms and indicators used by the ministries and administrations to present their proposals on the economic and social development of the Far East are not differentiated in terms of administrative regions. Meanwhile, the conditions for the development of production forces in the different zones (the North-East and the South) are very different.

In our opinion one important factor in improving planning for social development would be the compilation of a long-term program for the stage-by-stage creation of the social infrastructure in the Far East, matched with the long-term economic plan for the development of the region.

The availability of such a program, confirmed by the USSR Gosplan, will make it possible to orient the ministries and administrations and give the local soviet and planning organs and the sector and summary departments of the USSR Gosplan an opportunity when drawing up the annual and five-year plans to carry out purposeful work to fulfill the decisions of the directive organs concerning the priority development of social and everyday conditions in the Far East in order to attract and keep the population of that region.

Realization of the proposals to improve territorial planning for the development of the social infrastructure will require a marked activation of the territorial planning organs both at the center and at the local level and the more purposeful and specific participation of the scientific organizations in this, particularly the USSR Academy of Sciences Far Eastern Scientific Center Economic Studies Institute which, in our opinion, already has sufficient experience and qualified personnel.

In recent years the organs of territorial planning in the Far East have also been strengthened through the formation of the apparatus of a USSR Gosplan commissioner. Since 1983 the apparatus of the commissioner has already gained definite experience in its work, including finding solutions to social problems. In 1985, jointly with the local planning organs in the krais and oblasts and the autonomous republic it prepared proposals on projects for housing and social and everyday construction in 1986 and for the 12th Five-Year Plan on both the territorial and sector planes and balanced with the capacities of the subcontracting construction organizations, and approved by the local party and soviet organs. The proposals have been passed on to the appropriate departments of the USSR Gosplan and the ministries and administrations.

In our view, the period for organizing and establishing this territorial organ of the USSR Gosplan is overdue. Its practical work has shown that it is not enough to limit it to the task of preparing proposals for the draft plans for the most important directions in the economic and social development of the region. It would be correct to entrust it with fulfilling the functions of drawing up the drafts for current and long-term plans for economic and social planning in the Far East and the work associated with this.

First, under the leadership of this organ (it should obviously be called something else; for example, the Planning Commission for the Far East Economic Region) the territorial planning organizations, with the involvement of the scientific establishments, could draw up drafts for the territorial normative for the development of individual elements of the social infrastructure both for the region as a whole and for the krais, oblasts and autonomous republic, with differentiation according to whether they are dealing with cities or rural localities. These normative should be confirmed by the USSR Gosplan and USSR Gosstroy.

Second, under the leadership of this organ and jointly with the local planning commissions and scientific organizations a goal-oriented program could be drawn up for housing and social and everyday construction for the long term, balanced with the capacities of the subcontracting construction organizations, with subsequent confirmation by the USSR Gosplan.

On the basis of control figures reported by the USSR Gosplan and in accordance with the proposals offered above, this organ should establish for each kray and oblast and for the autonomous republic, on the basis of the level of development reached in developing the social infrastructure and of the territorial normative, the planned volumes of capital investments for housing and social and everyday construction and the commissioning of the corresponding projects. On the basis of these volumes the local planning



organs prepare a draft plan for the development of the social infrastructure, which will be submitted in summary form by the commissioner (or planning commission for the region) to the USSR Gosplan (after agreement with the RSFSR Gosplan). In his speech in Tyumen, CPSU Central Committee general secretary M.S. Gorbachev said that "... each project for the construction of new objects in Siberia and the Far East should be soundly substantiated from both the economic and the social standpoint and should provide for improvements in people's working and living conditions." [6]

In-depth analysis of projects and control over their unconditional fulfillment is an important task both for the apparatus of the commissioner and for all departments of the USSR Gosplan.

Realization of the proposals offered in this article to improve planning for the social development of the Far East Economic Region will, in our opinion, make it possible successfully to accomplish the economic and social development of this important region and increase the rates for the buildup of its economic potential and its role in the country's unified national economic complex.

#### FOOTNOTES

1. "Draft Program of the CPSU (New Edition)." Moscow, Politizdat, 1985, p 32.
2. Ibid.
3. M.S. Gorbachev. "Siberia—Quick March. Speech at the 6 September 1985 Meeting of the Party and Economic Aktiv of Tyumen and Tomsk Oblast." Moscow, Politizdat, 1985, p 18.
4. "Main Directions for the Economic and Social Development of the USSR 1986-1990 and the Period through the Year 2000 (Draft)." Moscow "Pravda" Publishing House, 1985, p 75.
5. Ibid., p 66.
6. M.S. Gorbachev. op. cit. p 30.

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